

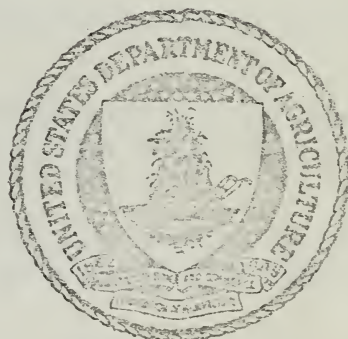
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Report of The SECRETARY of AGRICULTURE

1963



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Department of Agriculture
Washington, D. C.

The President
The White House
Washington, D. C.

Dear Mr. President:

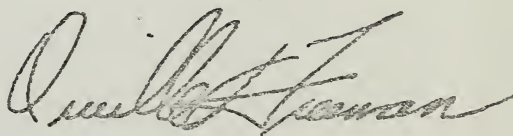
It is my privilege to present to you this report on the services rendered by the Department of Agriculture to our farm people and the entire Nation during the past year.

In your message to the Congress of January 31, 1964, you stated that the "American agricultural economy is the most productive in the world," and that "the consumer, as a result, must spend a smaller percentage of his budget to meet his food needs than ever before in our history."

The Department of Agriculture can claim an important role in both of these achievements.

In the pages of this report you will find a brief account of our current activities in keeping American agriculture productive and in providing a multitude of services for all consumers everywhere in the Nation.

On behalf of all the devoted public servants who work with me in the USDA, I take pleasure in submitting my annual report as Secretary of Agriculture for the year 1963.



Orville L. Freeman
Secretary of Agriculture

CONTENTS

| | Page |
|--|------|
| A YEAR OF PROGRESS..... | 1 |
| RURAL AREAS DEVELOPMENT..... | 3 |
| Better Rural Housing..... | 6 |
| More Jobs..... | 8 |
| Training and Education..... | 11 |
| Rural Community Facilities..... | 12 |
| Resource Development..... | 12 |
| More Profitable Farming..... | 15 |
| Rural America Is Changing..... | 16 |
| STABILIZING FARM INCOME..... | 18 |
| Price Protection and Production Adjustment..... | 18 |
| Crop Insurance..... | 22 |
| Emergency Programs..... | 23 |
| Agricultural Conservation Program..... | 24 |
| Improving Farmers' Bargaining Power..... | 24 |
| Strengthening Farmer Cooperatives..... | 25 |
| The Family Farm..... | 26 |
| SELLING OUR FARM GOODS ABROAD..... | 28 |
| Exports up Sharply..... | 28 |
| Expanding Our Exports..... | 29 |
| Helping Nations to Help Themselves..... | 34 |
| A Critical Period..... | 36 |
| SERVING ALL CONSUMERS..... | 37 |
| Abundant Food for Better Living..... | 37 |
| Lower Costs..... | 40 |
| Marketing Quality..... | 41 |
| New Products..... | 43 |
| Health Benefits..... | 44 |
| Serving Consumers Through Education..... | 45 |
| Recreation..... | 46 |
| Protecting Our People in a National Emergency..... | 47 |
| A LOOK AHEAD..... | 49 |

Report of The Secretary of Agriculture 1963

A YEAR OF PROGRESS

Agriculture is everybody's business, because everybody is affected by it. Not only do we look to agriculture for the food to sustain us, and for much of the fiber to clothe and the timber to shelter us; we depend on it for many other benefits, too. Our jobs, the size of our earnings, the prices of what we buy, our personal health, all the influenced directly or indirectly by agriculture. Even the position our country occupies in the family of nations depends in part on the capability and vigor of the agricultural segment of our economy.

The third year of this administration brought to the public both a sharpened awareness of agriculture's importance to us all and a deeper appreciation of the nature of America's farms. More Americans have begun to understand that farming in the 1960's is still a family business. And more Americans have come to know that while the Department's major interest is still our 4 million farm families, we serve all the people of the United States as well.

In this review of the state of agriculture, we emphasize four major accomplishments, which I will first briefly sketch and then expand upon at some length in the body of this report.

1. The Resources of Rural Areas Are Being Developed. Rural areas, where 54 million Americans live, are being pulled back into the mainstream of economic progress. Some 75,000 small-town and farm people are hard at work planning their futures, using the combined power of local businessmen, local resources, and government aid. An estimated 110,000 new rural jobs were created in 1963 alone; many thousands of farmers are being retrained to help themselves; and plans are on the drawing boards for hundreds of projects, ranging all the way from "cleaning up Main Street" to building multimillion dollar industrial parks on acres that once grew surplus crops. Rural America is being reinvigorated, revitalized, renewed.

2. Farm Income Has Been Stabilized at a Higher Level. Farm income had been generally declining since the early 1950's until the trend was reversed by a sharp rise in 1961. Looking at the past decade, we find that annual net income during 1961-63 averaged 800 million dollars higher than it did during 1954-60--and this despite a far smaller farm population. The per capita income of farm people, while still only three-fifths that of the rest of the Nation, has increased sharply in the past 3 years. Five years ago farm people had only half as much income as other Americans. The income of our farm families now represents a fairer share of the Nation's prosperity. But there is still much to be done.

3. International Agricultural Trade and Aid Are Flourishing. U.S. agricultural foreign trade (exports and imports) is now a \$10 billion business, and is still getting bigger. Farm commodity exports reached a new high of \$5.6 billion in calendar year 1963, and will be around \$6 billion in fiscal 1964. That these records have been established is largely the result of vigorous cooperative efforts by government and private groups. About 30 percent of our exports are Food for Peace; the balance consists of sales for U.S. dollars. One of our major U.S. "exports," from which immense benefits are expected in years to come, is agricultural know-how. The Department helped train 3,000 foreign visitors in various phases of agriculture last year. And more than half of the 5,000 American technicians now helping the people of other nations overseas are working to improve their agricultures.

4. The Department Provides More Consumer Services. Consumer services and protection are not new to the Department, but 1963 saw enhanced emphasis on these programs, and more effort to encourage consumers to use and understand them. Ever since 1883, when the Department studied butter adulteration, "to protect the consumer against fraud," the housewife and her family have benefited from many consumer-oriented "agricultural" programs. Eighty years later, in 1963, these programs and services have grown apace until they now range from old-line food inspection and grading to such modern innovations as housing for the rural senior citizen and water systems for small towns. Today, more than ever, the USDA merits the accolade bestowed on it by Abraham Lincoln, the title of "the people's Department."

- - - - -

In 1963, we thus continued and accelerated the new forces of upswing in agriculture, forces now being felt with growing salutary effect throughout America, and indeed the world.

How the various agencies of the U. S. Department of Agriculture blended into these efforts and accomplishments we shall now explore in some detail.

RURAL AREAS DEVELOPMENT

One part of the United States is characterized by two-car families, split level houses, and super supermarkets. This is affluent America.

Another part, hidden by a veneer of opulence and long overlooked in the hurried pace of 20th century living is characterized by low income, inferior education, and limited opportunities. This is impoverished America.

Nineteen million impoverished Americans live in city and suburban slums. Another 16 million are to be found in rural areas. Together they comprise almost one-fifth of the Nation.

The coal miner of the Appalachian Mountains with a wife and six children to feed and no coal to mine; the sharecropper in the South; the farmer in the coastal plains of the East whose acreage is too small to support him; the hired hand on a Pennsylvania dairy farm whose job has been taken over by a pipeline milker and automatic barn cleaner; the under-employed and underpaid workers in the Spanish-American areas of the Southwest; the Indians on reservations where, in winter, about half the men are idle and on public assistance rolls; part-time highway laborers, handymen, and older people who work at low-income jobs when and where they find them; these and others are the rural poor.

Lacking in both education and special skills, they are stranded in areas of too few resources and limited job opportunities. Progress has passed them by.

Poverty is particularly prevalent in rural America. The percentage of rural families with incomes below the income poverty line is almost twice as large as that of urban families. In 1959, one-third (33.5 percent) of all rural families had less than \$5,000 net income, compared with one in six (16.4 percent) in urban areas.

An attack on rural poverty, consequently, is one part of the Department's rural development objective.

The total objective, however, is far broader. Much of rural America lies between the extremes of affluence and poverty. Here we find not only clusters of farm families but whole villages, towns, and small cities which, while not impoverished, have been relatively bypassed by the economic growth of the past quarter century. In these areas, townspeople and farmers have, for some time, been seeking coordinated ways to strengthen their flagging economies. The Rural Areas Development (RAD) movement was organized to help make these local efforts more effective.

Rural Areas Development is the coordinated application under local leadership of all resources -- land, water, forests, wildlife, minerals, skills; capital, scenery, location with respect to markets or population centers, or whatever else can be turned into development resources -- from whatever source is available (local, private, or public), to the solution of rural economic problems and the reinvigoration of rural economies.

All of the agencies of the Department contribute in one way or another to the general aims of Rural Areas Development. Practically all of the new and on-going programs of the Farmers Home Administration, Rural Electrification Administration, Soil Conservation Service, Farmer Cooperative Service, and Forest Service are directly involved. Important programs or phases of the work of the Agricultural Stabilization and Conservation Service and the Federal Extension Service are also directly involved. The Agricultural Marketing Service and the research agencies provide needed knowledge and technical service on specialized problems. Functional aspects of the Rural Areas Development effort, such as encouragement of rural industrialization, emphasis on income-producing outdoor recreation enterprises on privately-owned rural land, and encouraging better rural community facilities, cross agency boundaries. Moreover, not all of the Federal programs that contribute to the success of Rural Areas Development efforts are located within the Department of Agriculture. Several other Departments and independent agencies are involved.

Thus, rural development covers a wide range of activity from research to financial loans, from education in the broadest sense to strictly technical assistance.

During the past year, for example, research has emphasized analyses of factors accounting for low-incomes, unsatisfactory levels of living, lack of employment opportunities in rural areas, and the development of specific recommendations as to how improvements may be brought about.

We need many basic data for the intelligent planning of programs: Facts on population changes and their effect, social relationships and attitudes, the impact of industrialization and urban expansion on agriculture, land use changes in the rural-urban fringe, and the principles and possible benefits of zoning.

We know that underemployment is heavy among rural people. In 1959 economic underemployment in the rural labor force was equivalent to nearly 3 million unemployed persons, 18 percent of the 16.5 million people in the rural labor force. Half of this unemployment was accounted for by farm men, whose equivalent unemployment rate was significantly higher. One-third of the farm men had some nonfarm employment.

To assess the labor force prospects in rural areas during the 1960's, estimates were computed by counties of the number of young rural men -- both farm and nonfarm -- who are reaching labor-force age in relation to the number of older men likely to die or retire in the same period. This research shows that 189 rural boys will reach age 18 during the current decade for every 100 rural men dying or retiring.

For the first time, data were collected from a national sample on the skill level of hired farm workers. A third of all persons doing hired farm work performed only hand or stoop labor. Nearly 45 percent worked at jobs of somewhat higher skill, such as truck and tractor driving or care of livestock and poultry. The remaining fifth of the workers were the skilled elite -- managers and foremen, mechanics for major machine repair, or operators of self-propelled machines.

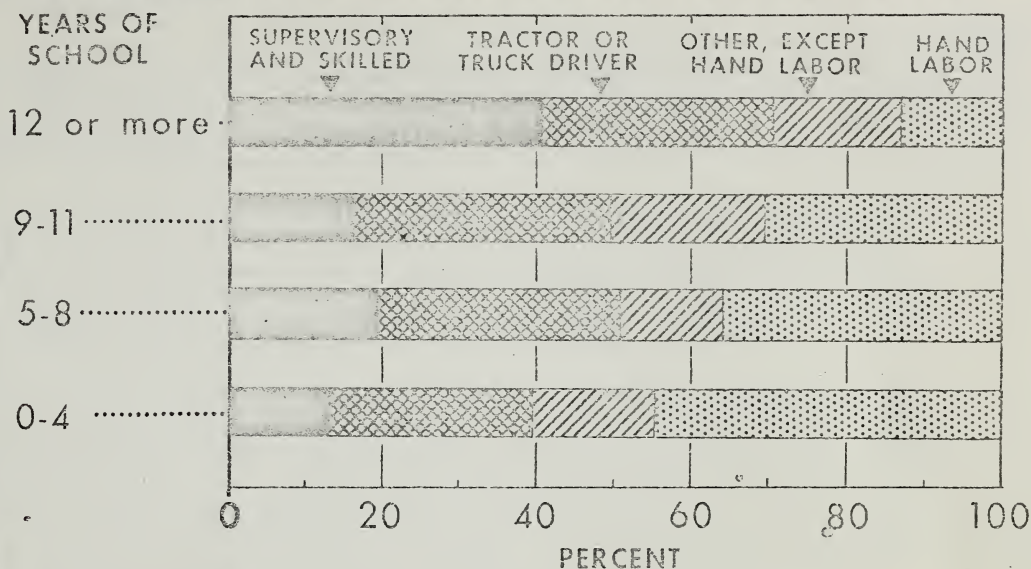
Information not previously available was also obtained for farm workers of Spanish-American origin. Though they numbered only 7 percent (261,000) of all hired farm workers, they made up a fourth of all migratory workers and were much more likely than other workers to be doing farm work on a relatively full-time basis, rather than just seasonally. Most are native-born U.S. citizens.

We know that rural people lag in education. Country schools are poorer than city schools. Fewer rural youngsters finish high school. Only 30 percent of rural high school seniors go to college -- compared with 50 percent in the cities. Since there is a definite relationship between education and the level of skill (and between skill and income), we are deeply concerned about the rural lag in education.

Is this lag growing or is it shortening? A report issued in fiscal 1963, dealing with the school progress of farm and nonfarm children, age 8-17, showed general improvement in progress of all children; and, further, that differences between the school progress of farm and nonfarm children had narrowed in the 1950's. Another report, studying school dropouts in 1960, showed that dropout rates were lower among farm children than among other rural children. Negro farm boys, however, had the highest dropout rate of any major group of children in the Nation in 1960.

What does rural America need for development and renewal? It needs better housing, more jobs, opportunities for training and education, improvement of community facilities, and better use of available resources. It needs, in addition, the continuation and expansion of efforts to make its farming enterprises more efficient and more profitable.

MALE FARM WAGE WORKERS BY EDUCATION AND SKILL LEVEL, 1961*

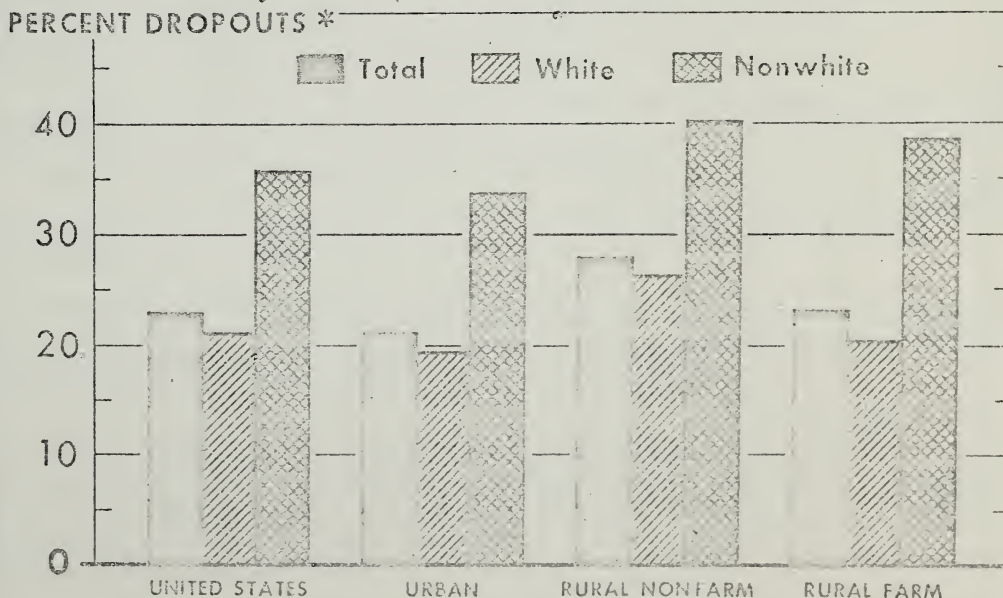


* HIGHEST SKILLED FARM JOB HELD 25 DAYS OR MORE IN 1961.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2090-63 (6) ECONOMIC RESEARCH SERVICE

SCHOOL DROPOUTS, 1960



* PERSONS 14-24 YEARS OLD WITH LESS THAN A HIGH SCHOOL EDUCATION AND NOT ENROLLED IN SCHOOL, AS A PERCENT OF ALL PERSONS 14-24. DATA FROM BUREAU OF THE CENSUS.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 1067-5713 ECONOMIC RESEARCH SERVICE

Inadequate, overcrowded, unsanitary, and unsafe housing is the primary characteristic of slum areas, whether in the city or the country. Housing in many parts of rural America is abominable. Through loans and grants, the Department is helping to ease the rural housing situation.

Housing Loans. These loans are made to rural landowners to construct and repair homes, with repayment at 4 percent interest over a period not to exceed 33 years. We estimate that about 50,000 persons will benefit directly from the 13,600 rural housing loans (totaling more than \$124 million) made in 1963. These figures include loans to provide homes for about 1,000 senior citizens.

In Goshen, Calif., the Department made loans to three farm laborer families, all with incomes below \$3,000, to help them build \$8,000 to \$10,000 homes at savings of \$3,000 to \$4,000 each. The families did most of the construction work themselves during the winter months when there was no cotton to chop or pick. A contractor with American Friends Service Committee volunteered his time to oversee the work.

In Gem County, Idaho, plans for expansion of fruit and vegetable production to meet growing local demand were being held up by a shortage of labor to pick the crops, largely because of the lack of decent housing for seasonal farm laborers. Three-way cooperation among the Department, a farmer group, and a private lender solved the problem. The lender agreed to make a \$50,000 loan to the farmer group, with USDA guaranteeing repayment of principal and interest. The loan has made possible a 48-unit housing development for farm workers and their families.

Senior Citizens Housing. A program of financing individual home and rental units for senior citizens living in rural areas was started in 1962. About \$6.1 million was borrowed for this purpose in 1963.

The first loan under this program was for \$100,000, made to a Lakewood, N. J., builder. It enabled some 20 elderly farm couples and other rural residents to live in a modern, convenient apartment, yet remain in the community where they farmed and raised their children and where their friends live.

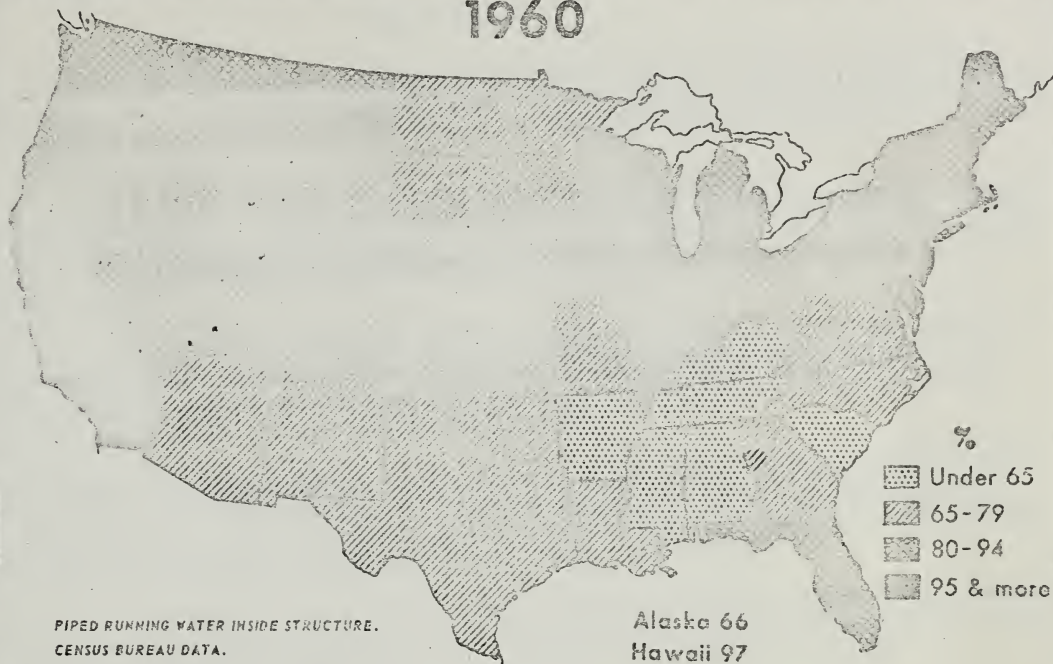
The \$124 million in rural housing funds invested in 1963 moved through the economy creating 10,000 man-years of construction work and a demand for lumber, plumbing, heating and electrical fixtures, concrete, paint, and furniture.

Housing Grants. The Department also makes small grants to families without the ability to repay a loan for minor house repairs essential to health and safety.

A 65-year-old widow living in eastern Kentucky's Russell County soon will have a safe and warm dwelling and good drinking water because of the accelerated housing program the Department inaugurated not long ago in that area. A son with severe health problems lives with her.

She obtained a \$900 grant to weatherize her home -- cover up broken windows in the attic, replace broken sash on two windows, put plastic covering over windows, and to drill a well, install an electric pump and repair the porch floor. Below zero temperatures are common in the area, and last winter water frequently froze in the house within a few feet of the main source of heat, the fireplace.

RURAL HOMES WITH RUNNING WATER, 1960



U.S. DEPARTMENT OF AGRICULTURE

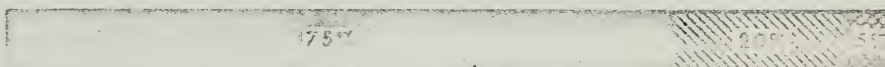
NEG. 63 (5)-5530 AGRICULTURAL RESEARCH SERVICE

CONDITION OF HOUSING

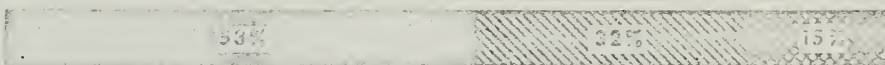
By Urbanization and Tenure, 1960

FARM

Owner



Renter



RURAL NONFARM

Owner

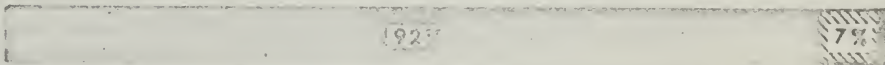


Renter

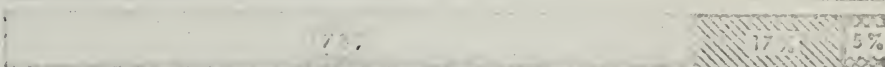


URBAN

Owner



Renter



Sound Deteriorating Dilapidated

OCCUPIED UNITS.

CENSUS BUREAU DATA.

U.S. DEPARTMENT OF AGRICULTURE

NEG. 63 (5)-5527 AGRICULTURAL RESEARCH SERVICE

In 1963, the Department made about \$1.7 million in small grants to help families make essential house repairs.

More Jobs

Many rural areas lack job opportunities. The Department is waging a two-phased attack against joblessness and underemployment -- first, by providing temporary employment, and second, by helping local people create permanent jobs and rebuild their economy.

Temporary Employment. The Department provides temporary employment through construction work on flood prevention projects, accelerated public works activity in the National Forests, and the building of homes and community facilities financed by direct or insured USDA loans.

During 1963, construction work under these programs provided more than 484,000 man-months of employment in hard-hit rural areas. These projects also helped rural communities raise their standard of living and broaden the tax base to support better schools, hospitals, and other community improvements.

Permanent Jobs. The major phase of the drive to raise rural standards of living is aimed at the creation of permanent jobs. As pointed out in the opening section of this report, we estimate that 110,000 permanent jobs were created in rural America during 1963 by the 3,869 RAD projects completed by local RAD committees.

To create these new jobs, over 75,000 local, private citizens working on 2,284 RAD committees carried out projects ranging from recreation-for-pay to new industry, from improved housing to municipal water systems and other community facilities.

Many USDA agencies played vital roles in this drama, among them the Extension Service, Forest Service, Soil Conservation Service, Farmers Home Administration, and Rural Electrification Administration.

Recreation as a Source of Income and Jobs

There are favorable opportunities for carefully planned recreational enterprises on farms and in rural areas. One-fifth of the employment and income in the Missouri Ozarks stems from recreation, and this source of business has doubled during the past 10 years. Recreational activities provide employment and moderate incomes for about 5,000 persons in the area.

A study conducted in East Central Ohio indicates that vacation facilities on farms can increase farm incomes, strengthen family farms, and provide recreational enjoyment for city people. Annual net incomes from these seasonal vacation farm enterprises range from about \$150 for smaller operations to \$1,500 for larger scale enterprises. The overall result has been a better use of farm resources and a boost to the local economy.

Recreation Loans. The Food and Agriculture Act of 1962 authorized the Department to make loans to farmers and other rural landowners to develop and operate recreation enterprises to increase family income and to help meet the fast growing demand for outdoor recreation.

Enterprises undertaken include such widely varied projects as golf courses, swimming pools, marinas, quail production for hunting, picnic grounds, and general accommodations for farm vacationers.

On the Iowa side of the Missouri River, farmer Don Ruth is building a boat harbor and service center, a camping and picnic area, and a restaurant with the help of a \$39,000 loan issued through a local bank and insured by USDA.

The loan will help Ruth increase his income while providing city dwellers in Sioux City and other nearby towns with the recreation they want and need.

Residents in or near 166 rural areas in 41 States will enjoy the expanded recreation facilities made possible with the \$3.5 million loaned farm operators and rural associations in 1963 to finance hunting preserves, picnic and camp grounds, golf courses, swimming pools, accommodations for fishermen and hunters, and lakes for fishing, swimming, and boating.

Technical Assistance for Recreation. Many farmers and rural landowners need only technical advice and assistance rather than financial aid to provide outdoor recreation facilities for city dwellers.

A Midwestern farmer converted part of his 230-acre livestock and crop farm to a hunting preserve. He provides the birds, dogs, and guides. For this service he charges a fee of \$15 per person per day and he guarantees two pheasants, five quail, or four partridges. The Department provided conservation aid that improved the supply of game food and cover.

Warren and Robert Clark's partially converted Iowa dairy and hog farm now has a "carrying capacity" of more than 5,000 golfers a month, drawn from the surrounding Des Moines area. This father-and-son team converted 80 acres of their 240-acre farm into a 9-hole golf course which attracts as many as 500 golfers on a good weekend. Floyd Harrison, SCS technician in Polk County Soil Conservation District, helped plan the land conversion, pointing out that grass on the rolling land would reduce soil loss and cut down on grain acreage. He suggested using the farm pond as a source of water to irrigate the fairway and golf greens. The Clarks converted the dairy barn into a club house and grew their own bentgrass stolons for planting the greens. The Clark farm conservation plan is already being revised again to convert another 80 acres of rolling cropland and pasture to permanent grass for expansion of the golf course to 18 holes.

By the end of 1963, the Department had helped 17,500 farmers and rural landowners develop recreation facilities. For 2,500 farmers and ranchers, recreation has become a major source of income.

Recreation in the Forests. To meet the increased demand for recreation in the National Forests, the Department built 8,700 new family camp and picnic areas in 1963 to accommodate 40,000 people.

These visitors bring increased incomes to local businessmen in areas surrounding the National Forests. They buy gasoline, food, and other supplies, rent boats and horses, hire guides, and need other services. We estimate that two dozen tourists a day equal the spending power of an industrial plant with a \$100,000 a year payroll.

About half of the recreation improvements in the National Forests were done with Accelerated Public Works funds, which also were used to speed forest development, as well as to finance some soil conservation watershed projects.

APW funds invested in recreation and forestry in fiscal 1963 totaled \$32.5 million. All except \$880,000 (which was granted to 14 States for improvements on State Forests) was used in 91 National Forests. Work done furnished a total of 46,377 man-months of employment to residents of economically depressed rural areas.

The Forest Service now has approximately 68,500 family camp and picnic units, enough to accommodate over 350,000 campers and picnickers at one time.

In addition, the cutting and processing of National Forest timber is a big factor in the economy of many rural areas. In fiscal 1963, the quantity and value of timber cut on

National Forest lands reached a new high -- 10 billion board feet worth \$134 million. One quarter of this total was returned to the counties for use in local schools and roads. This National Forest timber, from stump to end use, resulted in 514,000 man-years of work.

Industrial Development

Local RAD committees use help from several Federal agencies, some of which have programs which closely mesh with the USDA programs.

Lewisburg, Ky., had no public water system before the Commerce Department authorized a combination loan and grant of \$244,000 to build a water system for an industrial park, using water from a lake created by a locally sponsored watershed project, carried out with USDA help.

The water system made possible an expansion of a wood working plant, creating 10 new jobs in the factory and 50 jobs in lumbering operations, and the construction of a new plant, manufacturing layer crates and pre-fabricated "hog parlors," providing employment for another 100 men. It also helped the town to build a 50-unit nursing home that will provide 10 more jobs.

Other benefits from this project include a 900-acre lake which is being developed for recreation in cooperation with the State. A new boat shop has been opened on the lake, and it is estimated that several hundred thousand visitors will use the lake each year. More than 200 lakeside building lots have been sold, 50 cabins and a \$45,000 sportsman's lodge have been built, and 30 miles of public roads have been constructed to serve the area, plus a new bridge costing \$154,000. Electric and telephone lines have also been installed.

At Russellville, Ky., in the same watershed project, Emerson Electric Company has built a \$4 million plant and the Rockville Manufacturing Company, with 300 employees, announced it will double its size in the next few years.

In Martinsburg, Pa., five apple growers were looking for a way to expand their markets and improve their operations when they heard a USDA official explain the RAD program.

The next day, they started the ball rolling on a cooperative packing and marketing project that has provided them with international markets and made them directors of a co-op that did more than \$500,000 worth of business its first year -- far different from selling apples off truck tail-gates as they sometimes did before the co-op was organized. The Commerce Department, through its Area Redevelopment Administration, made an \$85,000 loan to enable the co-op to buy needed machinery. The rest of the funds came from private sources, local and State, and development authorities. The plant had 5 full-time employees and provided 6 to 7 months of part-time work to 40 women for grading and packing the apples during its first season.

In Corydon, Ind., local people used both USDA and Commerce Department funds to help finance a glass-sand company as part of a program for overall economic development of the area. USDA provided \$190,000 through its rural electrification Section 5 loan program and Commerce contributed \$470,750 in ARA loan funds. The plant will create at least 37 new jobs, and use sand deposits long known to exist but not developed because of a lack of financing.

In Sutton, W. Va., 500 new jobs will be created as a result of loans and other help by Rural Areas Development and the Commerce Department's Area Redevelopment Administration. A \$1,320,500 loan enabled a forest products company to set up a particle board and plywood plant. Forest owners of the area will benefit by a ready market for logs and pulpwood. The Forest Service helped determine types and quantities of the area's wood supply, as well as the feasibility of the project.

Variations of these stories are being repeated in thousands of communities.

Small Business Administration funds have been put to use with telling effect to help carry out the economic development objectives of RAD groups in Southeast Iowa.

In Appanoose County a \$348,000 SBA loan financed a 100-bed nursing home, and other SBA funds made possible the expansion of three businesses in Centerville, the largest town.

Other Federal agencies helped finance other parts of the RAD program in Appanoose County. The Community Facilities Administration used \$200,000 in Accelerated Public Works funds to expand the Centerville water system, and the Federal Aviation Agency made a \$61,040 grant to expand the airport, thus clearing the way for Union Carbide Corporation to build a \$2 million plant in Centerville. The plant now has 65 workers, but employment may go as high as 400 to 800 persons.

Industrial plants in rural areas strengthen family farms by enabling farmers to consolidate holdings into stronger economic units by buying or renting. Farm families who lease or sell acreages to other family farms in order to work in such industrial plants frequently remain on their homesteads, combining some farm work with work at the new factory.

Training and Education

Along with more job opportunities, strengthened training and retraining programs are urgently needed in rural America. With automation and technological advances placing new demands on labor, the Nation will be able to utilize fewer poorly educated and unskilled workers in the next 5, 10, or 15 years. New industries will not locate in rural areas unless manpower resources, including skilled workers, are there.

The Departments of Agriculture, Commerce, Labor, and Health, Education, and Welfare carry out training and retraining programs to help the jobless and underemployed obtain the skills they need to get jobs and improve their level of living.

Agriculture provides its assistance through the educational efforts of 15,000 county, State, and USDA Cooperative Extension workers. Cooperating with local people on problems ranging from improving farm income to helping communities adjust to rapidly changing conditions, they play a leading role in planning and implementing training and retraining programs for both young people and adults.

The Commerce Department program is available in areas designated under the Area Redevelopment Act. It offers both in-school and on-the-job training for jobless and underemployed workers. Trainees may receive subsistence payments equal to the State unemployment compensation benefits for a maximum of 16 weeks.

The Departments of Labor and Health, Education, and Welfare cooperate in administering the Manpower Development and Training Act, which provides training for jobless persons and members of farm families with a net annual income of less than \$1,500. During the training period, trainees may receive a Federal training allowance for up to 52 weeks.

Under the Food and Agriculture Act of 1961, the Department was authorized to make loans to rural groups, as well as to farmers, to develop community water systems. The Department can insure loans up to \$1 million.

For many areas, a water system is the key that unlocks the door to industrial development and the building of new homes. In New Market, Tenn., a water system was completed in August 1962. A zinc processing plant moved in and already is expanding, a new machine shop and a new restaurant have opened up, an existing subdivision has expanded, and two new subdivisions have been opened.

In a small community 2 miles beyond the water mains of Somerville, Tex., mothers had to skimp on water for washing, and even ration baths during dry periods. Fire was a constant threat. Some families began to talk of selling out at a loss and moving away, though the 37 families had built their community from scratch, financing their small homes with money earned from part-time farm work and in a small plant that made railroad ties.

Then, leaders in the community heard about possible USDA financial help. The newly formed rural water association raised \$1,260 and USDA guaranteed a \$24,000 loan made through a local bank, bringing water to the town's families.

In 1963, 80,000 rural people were provided with safe, dependable water as a result of Department loans totaling \$17 million to 150 rural water associations.

Resource Development.

Resource development activities of the Department are concentrated in five agencies -- the Forest Service and Soil Conservation Service, which primarily provide management, technical services, and improvement, and the Agricultural Stabilization and Conservation Service, Farmers Home Administration, and the Rural Electrification Administration, which offer basically financial assistance.

Forest Service

Lack of opportunity is a prominent problem in some of the Nation's forested areas. The Forest Service is vigorously pushing research and multi-use programs to overcome this problem.

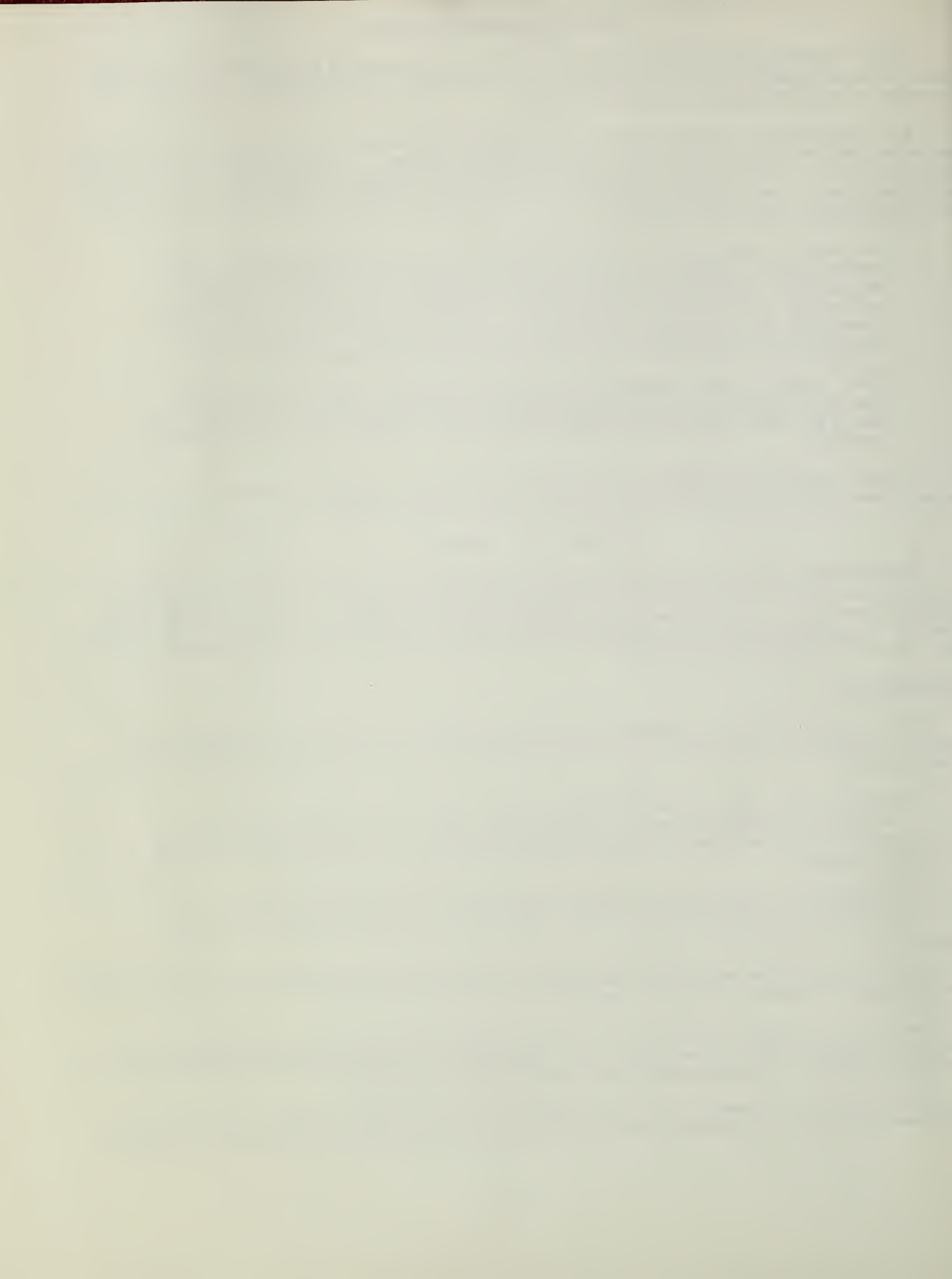
Buyck, Minn., has a new \$89,000 wood products plant using timber from the Superior National Forest. Local people invested \$37,000 and a loan from the Area Redevelopment Administration (Department of Commerce) made up the balance.

The plant went into full operation in April 1963. It will furnish peeled posts and poles to a plant in Siren, Wis., where the poles will be given a preservative treatment and marketed.

The Forest Service works with the States to help private woodland owners develop their wooded areas for greater financial return.

Last year, 101,000 woodland owners were aided by this program. Cooperative work covered 5,762,000 acres. In addition, more than 9,000 operators of small sawmills and processing plants were helped with their wood and plant problems.

During the past 3 years, more than 280,000 small woodland owners have been provided new and follow up on-the-ground help through the State forestry agencies in applying



approved practices in the management and use of their woodlands. The value of timber products harvested by these owners in 1963 amounted to almost \$14 million.

Such assistance helps train landowners in good forestry practices, thereby increasing their ability to support themselves or supplement income from their woodlands.

Soil Conservation Service

SCS provides technical assistance to soil conservation district cooperators and others in planning and applying soil and water conservation practices that protect and improve the soil and boost income.

Fifteen years ago, Smith County, Tenn., was a gullied, eroded land of low-income corn farms and widespread poverty. SCS technicians helped local farmers fill in the gullies and switch to grassland and cattle raising. Today, Smith County is prosperous, and bank assets are more than ten times higher.

SCS also administers the Department's small watershed program, which is one of our most effective tools for improving rural economies.

In Oklahoma, the people of Duncan, ranchers in the surrounding territory, and owners of oilfields in the area got together to stop the floods that were destroying roads, bridges, and expensive oilfield equipment and eroding the fertile grazing land. They also wanted to prevent water shortages that plagued the area.

The cost to the local people of remedying this situation was \$2 1/2 million, including the land, dam construction, and building a new water plant and new mains. By a 13 to 1 margin, Duncan voters approved a bond issue to finance these local costs.

With adequate water assured, Duncan's industries began investing in plant expansions. Refineries already have spent more than \$2 1/2 million to expand their operations, and the city's largest oilfield service company has announced plans for a \$6 1/2 million expansion.

Flood protection, irrigation, and soil conservation measures have increased agricultural income \$1 million a year. Bank deposits and personal savings are up, and housing construction is at a high level. Duncan stands sixteenth in Oklahoma in population, but last year's retail sales of \$42 million were seventh highest in the State.

The watershed program was expanded by the Food and Agricultural Act of 1962 to provide for additional water storage for municipal and industrial use and for recreational development. In the first 11 months of 1963, projects authorized for planning were up 7 percent over 1962. Construction starts were up 26 percent. As of January 1, 1964, the Department had received 2,039 applications from sponsoring local organizations for assistance on watershed projects.

Approximately 40 percent of the projects authorized for operation in 1963 had multiple purpose objectives combining watershed protection and flood prevention with other purposes such as recreation, fish and wildlife development, water management, and municipal water supply.

About \$190 million was obligated in fiscal 1963 in all watershed programs, including \$101 million of Federal funds and an estimated \$89 million by local sponsors and agencies.

Cropland Conversion Program

This \$10 million program, which is being initiated on a pilot basis, provides for the

development of recreation, wildlife habitat, grazing, forests, or water storage on land now producing row crops or hay, or land in Federal diversion programs.

Farmers who participate in this program receive adjustment payments, cost-sharing payments, and technical assistance.

In Calhoun County, Mich., farmer Bernard Katz plans to develop 166 acres as a site for fishing, swimming, boating, camping, horseback-riding, and hiking. He also plans to have tobogganing and ice skating in the winter. Ninety-three acres are now in crops. He will receive USDA assistance under the Cropland Conversion Program.

Nationally, through this pilot program, the Department has helped about 2,800 land-owners in 37 States to convert excess cropland to other, more economic uses. About \$7.1 million was used in this program.

Conservation Cost-sharing

Through its Agricultural Conservation Program (ACP), USDA shares with farmers the cost of necessary conservation practices which the farmers otherwise could not afford. About one-third of the farmers participating in ACP (administered by the Agricultural Stabilization and Conservation Service) have farms of less than 100 acres, and the cost-sharing funds per acre average much greater on the small farms than on the large. In 1963, conservation cost-sharing payments, estimated at \$212 million, aided 1.2 million farmers.

Farmers Home Administration

FHA, in addition to its other services, provides local sponsors of watershed projects with loan funds to help them meet their share of the projects' construction costs.

On December 5, 1963, FHA made the largest watershed loan in its history -- nearly \$1.8 million to Bibb County, Ga. -- to help finance a multipurpose watershed reservoir for flood prevention, industrial water storage, and recreational purposes.

Additional water storage provided by the project will help Bibb County attract more industries, increase fishing and hunting opportunities, and provide facilities for boating, skiing, camping, picnicking, and hiking, assuring an increase in tourist dollars for the area.

In Colorado a group of farmers, some with net annual incomes as low as \$1,500 to \$2,000, organized a grazing association and borrowed \$375,000 from the Department to buy and lease 15,000 acres of grazing land. The Department estimates that each member's income will be increased about \$2,500 a year as a result of the better feed situation for cattle.

During fiscal 1963, loans made or insured by FHA totaled more than \$795 million -- a record high, and 25 percent more than the 1962 total. These loans were a major factor in helping combat rural poverty.

Rural Electrification Administration

People in rural areas need electric and telephone service on a par with urban people if they are to participate in national growth and realize their full economic potential. About 1,800 rural electric and telephone systems, financed through REA, are helping close the long-existing gap between urban and rural electric and telephone services.

Mr. and Mrs. Harry Franke will remember 1963 as the year their lights went on. For most Americans this occurrence is taken for granted. But for the Franks it was a memorable event because they live in the Yaak River

Valley, high in the Bitter Root Mountains between Montana and Idaho. Until electricity reached this remote area making possible the use of electric lights, electric irons, and electric water-pumps, families in the valley depended on kerosene lamps, flatirons, and hand pumps.

The brightly lit lamp in the Franke's rural home was made possible by a combination of local initiative and Federal financing through Rural Electrification Administration loans. Along 21 miles of new powerline extended through heavy forest by the Northern Lights Cooperative of Sandpoint, Idaho, electricity now flows into about 30 log cabin homes, a Forest Service ranger station, a sawmill, and a one-room school.

Loans for Rural Consumers. During 1963, REA loaned \$155 million for distribution lines to serve 182,000 new rural consumers and for improved facilities to provide better service to existing consumers. In addition, REA approved \$183 million for generation and transmission loans. These "G and T" loans provide a means of assuring enough power for distribution borrowers.

Telephone Program Moves Forward. During 1963, 35 new telephone system borrowers were included in the 198 telephone loans approved by REA. This raised the number of telephone systems financed by REA in the 13-year-old program to 820 -- of which 602 are commercial companies and 218 are cooperatives. Telephone loans during the year amounted to \$86 million, bringing total loans for this program to \$991 million. The 1963 loans make possible new or improved service to 116,000 subscribers. About 1.5 million farms and homes, including community, commercial, and industrial establishments, are being served by REA-financed telephone facilities. Seventy-six percent of our farms now have telephones.

Rural Development. REA gives special emphasis to the Rural Areas Development program on the premise that helping borrowers develop the rural areas they serve will enable them to improve their own financial position and ability to repay their government loans.

Rural electric cooperatives, in turn, recognize that their effectiveness depends on the economic well-being of the areas they serve. They provide, at their own expense, much of the local leadership and work needed to stimulate economic progress in the low income areas in which they operate.

In early 1963, reports from one-third of the 1,800 borrowers showed that in the preceding 18 months they had helped launch 402 industries, providing direct employment for 30,000 persons and indirect employment for 20,000 -- all living in rural areas or small towns.

These borrowers also helped launch 155 needed public facilities such as water systems and hospitals. More than 90 percent of the credit involved in these projects was raised locally, with REA financing providing less than 1 percent of the total. Such "seed money" loans made by REA in 1963 totaled \$767,500. These loans are made under the consumer financing provision (Section 5) of the Rural Electrification Act.

During 1963, REA's rural development staff provided technical assistance to borrowers and other local groups for about 800 projects.

More Profitable Farming

More efficient and profitable farming, of course, remains a major objective of rural development. Naturally, all of the agencies of the Department play important roles in this phase of rural development.

The Farmers Home Administration, for example, provides credit and technical assistance to farmers to help them make adjustments necessary for more efficient and profitable operation.

In fiscal 1963, FHA made farm ownership and operating loans to 92,000 farm operators unable to get credit from conventional lenders. Many used the funds to gain the resources needed to raise their incomes to adequate levels. Some were part-time farmers, working in local industries, who needed to reorganize their farming patterns to get the highest possible return. Then, there were farmers who, because of age or other handicaps, found it impossible to get off-farm employment. These borrowers received technical supervision as well as credit. The Department helps them work out and maintain both yearly and long-term farm and home development plans. At least once each year, FHA supervisors help them review their year's operation, with special emphasis on production, financial management, marketing, household spending, and other farm and home planning.

Other types of technical assistance were offered by the Soil Conservation Service -- which aids farmers to manage soil and water efficiently and profitably and with minimum waste of resources and labor--and by the Extension Service--which puts localized know-how at the fingertips of farm people.

SCS points out, for example, that production of crayfish in rotation with rice in Louisiana is increasing some farmers' incomes.

Extension carries the results of research projects to farm families in rural development areas, showing them how to make more effective use of their resources. Research points to greater production and preservation of food at home as a simple way to improve diets and add to cash incomes. Increased use of milk, tomatoes, cabbage, collard, and turnips is recommended to offset diets traditionally low in calcium and in vitamins A and C. Research-based publications on home preparation of various foods are made available; as are others containing food plans and market lists to help families budget their food money and decide what and how much to buy. Still others show homemakers how to buy, use, and care for clothing and household equipment.

Improved methods of harvesting and processing maple sirup have brought greater cash returns to low-income farmers, many of whom are now realizing up to \$150 per acre. This industry now provides an opportunity for thousands of rural people to improve their incomes.

New techniques are available, some of them requiring little money or equipment, for cutting the costs involved in farming and avoiding losses caused by insects, diseases, and weeds.

Such simple yet effective measures as pasture management and rotation grazing reduce losses from livestock disease and parasites. Minimum tillage techniques, such as weed control by chemicals or by flaming or yearly re-use of previously tilled rows, lower the costs of producing cotton. New low-cost methods of collecting water for livestock in areas of little rainfall help farmers fully use their rangelands. The use of these techniques frequently makes the difference between an erratic and mostly substandard farm income and one that is reasonable and assured from year to year.

More profitable farming is concerned with new markets, too. On September 19, 1963, a new \$760,000 plant in Cashmere, Wash., started producing an apple juice concentrate with a process developed by the Department of Agriculture. Operated by a farmers' cooperative, the plant is expected to furnish a market for some 50,000 tons of apples a year. It will also create about 100 jobs.

Rural America is Changing

Rural America is changing. The old picture featured young people leaving in search of jobs; little, if any, business opportunity; small, underdeveloped, unprofitable farms; no local processing plants for farm products; high unemployment; few opportunities for

vocational training; a lack of recreational facilities; inadequate sanitation, water supply, and sewage disposal systems. These defects were common in rural America a few years ago.

Today, people in more than 2,000 counties have, with the help of cooperative extension agents, organized Rural Areas Development committees to come to grips with problems of economic stagnation. Leading citizens -- representing agriculture, business, finance, labor, schools, churches, local government, and other interested groups -- are surveying their area's assets and problems and organizing "bootstrap" operations to make best use of their resources.

In Arkansas, more than 50,000 persons took part in the "Arkansas Future," a self-administered discussion group series which set the stage for the organization of 55 county and area development councils.

Hundreds of thousands of persons have been involved in discussion programs in other States: The "Colorado Agri-Challenge," "Growing Minnesota," "Opportunities for Missourians," "Montana's Vital Issues," "North Carolina's Decisions for Progress," "Ohio's Future," and "Pennsylvania Growth."

Early in 1963, Louisiana launched a series of 10 area economic development conferences to stimulate thinking, planning, and constructive action by local people.

Ten counties in Southern Illinois have formed a development council to harness talents in a united effort. They have long-range plans to develop recreation facilities, bring in new industry, sponsor more feeder pig and calf sales, create a conservation district, and develop historic and scenic areas.

More than 700 4-H Club members in Jackson County, Minn., have been given a clearer understanding of training needs and are better equipped to make career choices. A youth business program in Pettis County, Mo., gave 147 4-H'ers new insights on different marketing functions. This helped motivate them to stay in school and prepare for job opportunities.

Such activities are going on throughout the Nation. They will grow; they will expand; they will exert an ever-widening circle of influence.

Part of America is affluent, part is still impoverished. But a new note is now heard in rural America. Once again sounds of hope are being voiced in the land.



STABILIZING FARM INCOME

During the past 3 years a series of new farm programs has achieved considerable progress toward one of the basic goals of this Administration's agricultural policy: Higher farm income.

Gross farm income in 1963 was \$3.1 billion higher than in 1960, a gain of 8 percent.

Net income per farm rose during this same period from \$2,961 to \$3,430, a gain of 16 percent. Per capita income of farm people reached a record high of \$1,480 in 1963, 18 percent above 1960:

Farm dependent towns and industries have reflected this economic improvement. Bank deposits in agricultural counties have increased 20 percent; and farmers have been able to purchase an estimated \$800 million more in farm equipment in the past 3 years than they would have been able to buy with a 1960 level of income.

Farm output in 1963 reached a record high for the sixth consecutive year. Livestock output was 2 percent above 1962. Crop output increased nearly 5 percent. Despite 6 percent less cropland in production in 1963 than in 1957-59, farm output was 12 percent higher than in the earlier period.

While output was up, labor used on farms in 1963 fell to a new low of 8.9 billion man-hours. With labor productivity at a new high, farm output per man-hour rose 12 percent higher than in 1961, 6 percent higher than in 1962. Thus, one of the most meaningful trends of the previous decade is continuing in the present decade. Compared with 1950, for example, less than 60 percent as much labor was required in 1963 to produce nearly one-third more output.

Farmers, however, are still not reaping a fair share of the benefits of this amazing productivity. Increases in marketing charges and decreases in farm product prices reduced the farmer share of the consumer food dollar to only 37 cents in 1963 -- the smallest farmer share since the 1930's.

Charges for processing and distributing food products averaged about 4 percent higher per unit in 1963 than in 1962, a process which has been going on each year since 1950. The 1963 increase, however, was the largest since 1958.

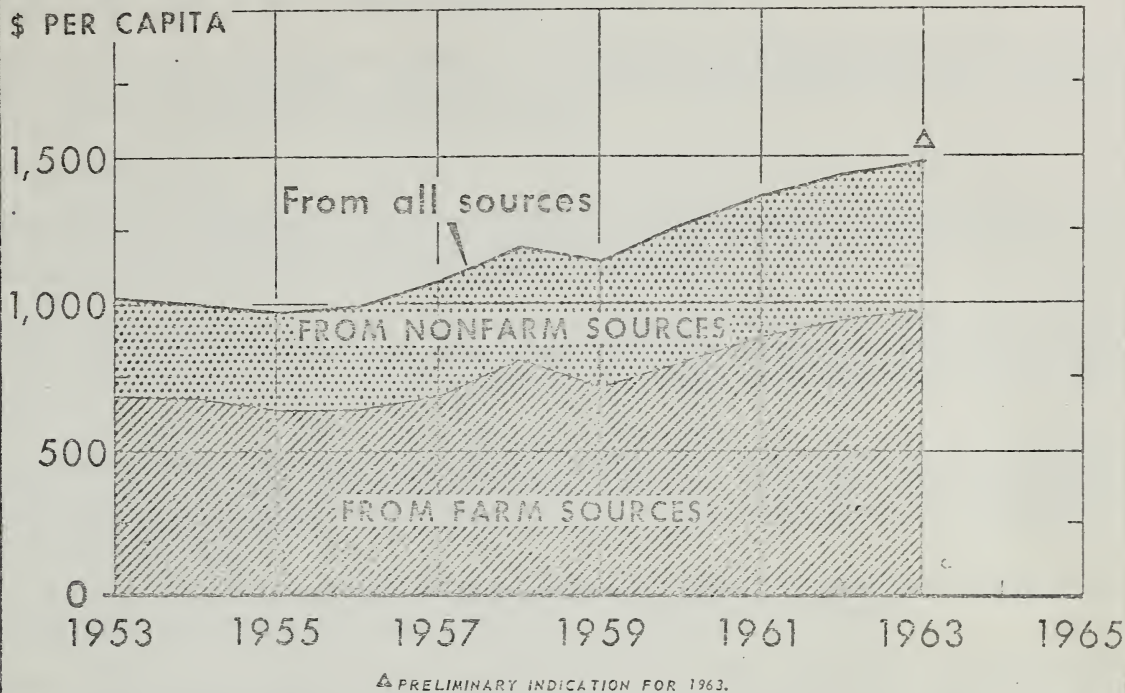
Nevertheless, the financial position of U.S. farmers improved further during 1963. While operators' net realized income from farming was estimated at \$12.3 billion compared with \$12.6 billion in 1962 and \$11.7 billion in 1960, farm assets rose nearly \$10 billion. Farm real estate assets increased \$8.5 billion, other physical assets nearly \$1 billion, and financial assets \$400 million. Both farm mortgage debt and non-real estate debt also rose in 1963, but loan payments were well maintained and delinquencies continued small. Despite an increase in total farm debt of \$2.8 billion, equities of operators and landlords rose about \$7 billion.

Prices received by farmers were little changed overall; crop prices were generally a little higher, those for livestock and livestock products a little lower than in 1962.

Price Protection and Production Adjustment

Farm income was maintained at a relatively high level in 1963, largely because of the price stabilization and commodity adjustment programs carried out by the Department.

PERSONAL INCOME OF FARM POPULATION

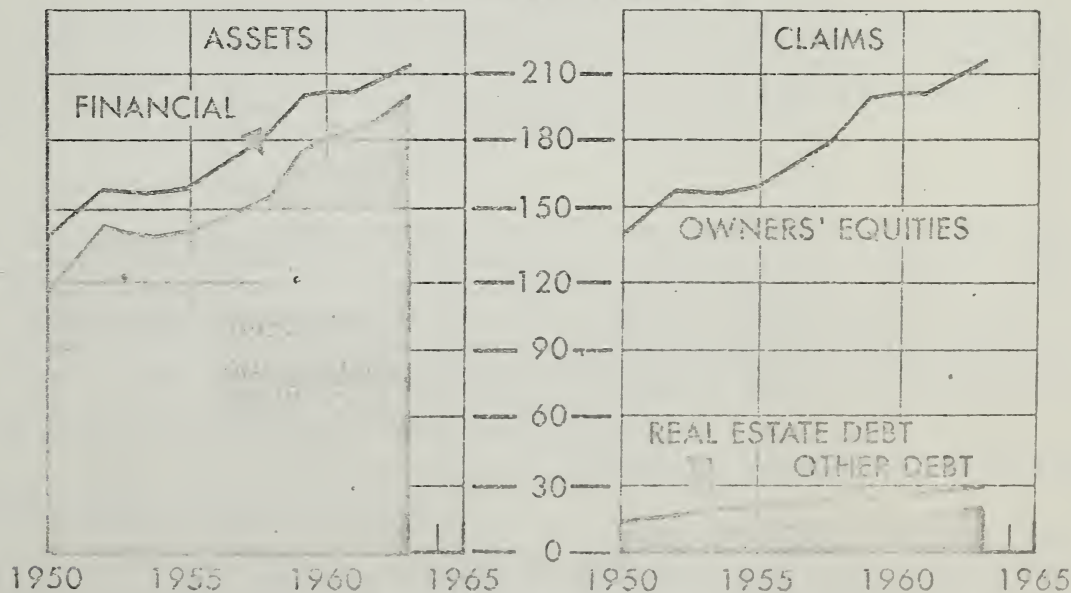


U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2076-64 (2) ECONOMIC RESEARCH SERVICE

FARMERS' ASSETS, EQUITY CONTINUE TO RISE

BILLION DOLLARS *



* MARKET VALUES, JAN. 1, '63.

U. S. DEPARTMENT OF AGRICULTURE

NEG 2357FI-23

During fiscal 1963, the Department made price support loans totaling \$3 billion on 16 agricultural commodities. Purchases of price supported commodities, other than those put under loan, came to \$459 million.

Our commodity adjustment programs included acreage allotments on 1963 crops of wheat, rice, tobacco, peanuts, and cotton -- and diverted acreages for corn, grain sorghum, and barley under the feed grain program.

Feed Grain Program

During 1963, largely as a result of programs enacted by the Congress for the crop years 1961, 1962, and 1963, notable progress was made toward a successful solution of the problems arising out of overproduction of feed grains.

More than 1 million farmers voluntarily participated in the feed grain program during 1963, as well as in each of the prior 2 years. The program allowed them to reduce corn, sorghum, and barley acreage in return for acreage diversion payments and price supports.

The story of the reduced corn surplus indicates the effectiveness of the programs. In 1960-61, the carryover of corn was 2 billion bushels. It cost the Government \$132 million annually for storage and handling charges. Farm income was declining then, despite soaring yields.

The outlook by mid-1963 was brightly different. In only 2 years the carryover of corn had been reduced by 700 million bushels -- a 35 percent decrease.

As a result of reduced production under the 1961, 1962, and 1963 feed grain programs, it is estimated that the Government will realize ultimate net savings of \$1.3 billion in reduced storage, handling, carrying, and acquisition costs.

Meanwhile, realized net income from farming in the Nation in 1963 stood about \$600 million above 1960. In this gain the feed grain programs have been a major factor. In both 1963 and 1962, the Commodity Credit Corporation made payments for acreage diversion in the form of grain from government stocks.

U.S. feed grain exports reached a record level during 1963, showing a slight increase over the former record year of 1962. This increase reflects the growing demand for feed grains to support expansion of livestock industries in many countries, particularly in Western Europe and Japan. While corn continues to be our biggest feed grain export, sorghum registered the greatest increase over the preceding year.

Soybean Price Support Highly Effective

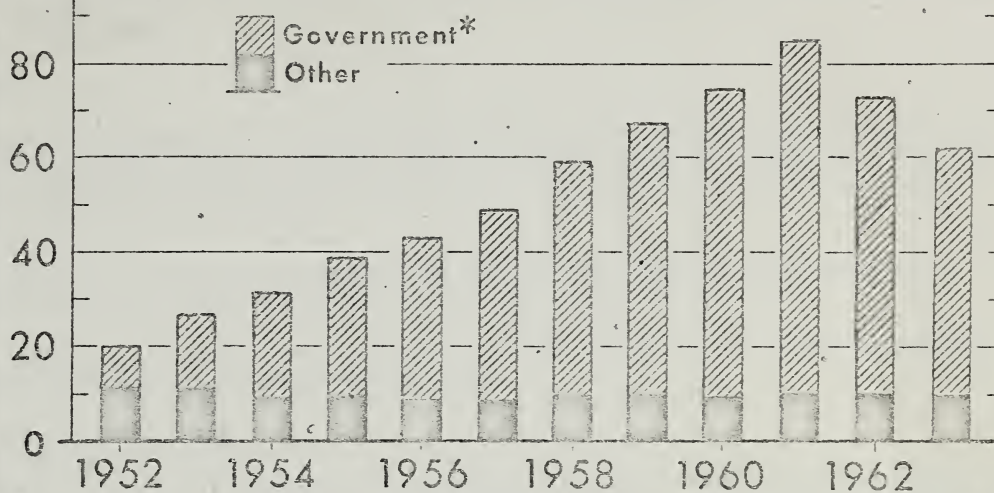
The soybean program also contributed greatly to the stabilized income situation. Record domestic and export demand for soybeans maintained market prices well above price support levels in 1963, even though supplies also were at record levels. In the absence of reasonable price supports, however, production of soybeans might have fallen below demand, as it did in 1960 after a period of low price supports and low prices. Instead, price supports at reasonable levels encouraged farmers to produce more soybeans to fill increased demand, and then assured producers against low distress prices, thus helping provide substantially better farm income.

Price support rates for the 1963 crop were at a national average of \$2.25 per bushel, unchanged from the average 1962 level.

Lessons of the past always help emphasize results of the present. Early in 1961, for instance, prices for 1960 crop soybeans soared -- after most of the farmers had sold their beans. Farmers thus lost potential income and the Nation lost dollar markets abroad because we lacked beans to meet the demand. To correct this situation, soybean price supports for the 1961 crop were raised.

FEED GRAIN CARRYOVER

MIL. TONS



* UNDER LOAN OR OWNED BY CCC.

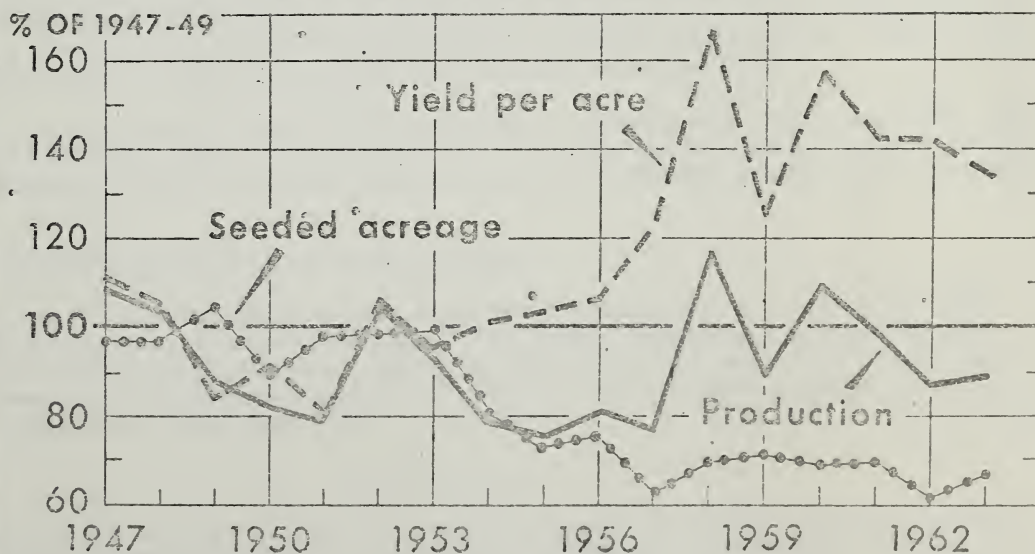
STOCKS OF CORN AND SORGHUM GRAIN OCT. 1; OATS AND BARLEY JULY 1.

1963 BASED ON PROSPECTS FOR PRODUCTION AND DISAPPEARANCE AS OF JULY 1963.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 1004X-63/6 ECONOMIC RESEARCH SERVICE

WHEAT ACREAGE, YIELD, AND PRODUCTION



1963 BASED ON JULY 1 INDICATIONS.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 66-50/7 ECONOMIC RESEARCH SERVICE

This resulted in a substantial increase in income for soybean producers. Cash returns from soybeans totaled \$1.5 billion from the 1962 crop and \$1.4 billion from the 1961 crop. These returns compare to only a \$1.1 billion cash return from the 1960 crop, when soybeans were price supported at \$1.80 per bushel.

Soybeans offer a good example of price support used as a positive instrument to improve the economic position of farmers and also assure plentiful supplies of an important agricultural commodity.

Cotton Problems

Contrary to the feed grains and soybean experience, shortcomings in the cotton program became increasingly apparent during 1962 and 1963. Built-in rigidities of the law were working to depress the income of cotton farmers, to penalize U.S. cotton mills, and to hold down domestic use of cotton.

With the help of the Advisory Committee on Cotton, the Department worked out a number of proposals to the Congress aimed at solving the cotton problem.

The cotton industry, however, was unable to get behind any single set of recommendations and legislation was not enacted during 1963.

Wheat Quota Vote for 1964 Crop

Wheat growers, voting in a national referendum on May 21, 1963, rejected a proposed program for the 1964 crop. The vote was 584,284 (47.8 percent) "for" and 638,572 (52.2 percent) "against."

The proposed program would have provided price support at a national average of \$2 per bushel (the same as in 1962) on that part of the national production required for domestic consumption, plus a large part of exports. On individual farms, the \$2 support would have applied to about 80 percent of the normal production on the allotted acres. On the balance of production, price support would have been in line with world and domestic feed prices, averaging about \$1.30 per bushel. In addition, producers would have received payments for acreage retirement.

For the first time, producers on 1.2 million farms growing wheat on less than 15 acres could vote in the referendum. Although they represent two-thirds of the Nation's wheat farms, these farms normally produce about 16 percent of the crop. The 600,000 farms with 15 acres or more in wheat produce 84 percent of the crop.

Overall, the programs in wheat and feed grains, starting with crop year 1961, have reduced stocks by more than 1.2 billion bushels, contributing to a better balance between supply and demand. They have made possible ultimate Government savings totaling \$1.6 billion.

Allotment and Quota Programs (other than wheat)

Besides wheat, acreage allotments and marketing quotas were in effect for 1963 crops of cotton, peanuts, rice, and tobacco. Favorable percentages of 1962-63 votes affecting 1963 crops were as follows: Upland cotton, 94; extra long staple cotton, 82; rice, 88; peanuts, 97; tobacco-burley, 99; Virginia suncured, 99; Maryland, 84; cigar-binder, 96; cigar-filler and binder, 90.

Crop Insurance

Another of our "income stabilization" programs protects farmers against natural disaster. Modern farming costs have brought into sharp focus the need to improve the economic stability of agriculture through a sound system of crop insurance.

Without Federal Crop Insurance, just one crop failure can put a farmer out of business.

In 1962 and 1963, we expanded our crop insurance services to the maximum of 100 new counties permitted each year by legislation. Experimental insurance also was started on the three new crops permitted each year by legislation. Through 1964 this expansion will result in crop insurance in 1,196 counties compared to 890 in 1961, and on 22 crops compared to the 14 for which insurance was developed during 1939-60.

This maximum addition of new counties and crops was supplemented by expanding the insurance service available in existing counties. We offered insurance in 1963 on 2,378 crops in the 1,096 insurance counties -- compared to 1,597 crops in 1961. Addition of insurance on other crops in these counties gave farmers the opportunity to insure more of their total production costs than was possible earlier.

Nearly \$1/2 billion protection was provided in 1963, the highest in the history of Federal Crop Insurance. This represented an increase of about 80 percent in the insurance in force during a 2-year period. A premium increase of about 68 percent and an increase of 30 percent in the number of crops insured during this 2-year period illustrate that farmers also are getting more protection for their crop insurance premium dollars.

Even with 1963's record volume of service, however, we are only scratching the surface in meeting the national insurance need for stabilized farm finances.

Dramatic losses make national headlines -- like hurricane damage or the severe winter freezes last year which destroyed citrus crops in both Florida and California and resulted in Federal Crop Insurance helping through indemnities totaling \$6,300,000. Less spectacular losses, however, are no less devastating to thousands of farmers' finances and futures.

Emergency Programs

Other disaster assistance was rendered under emergency programs. Drought and severe winter and late spring frosts combined to strike heavy blows at farmers in the South, the Southwest, and parts of the Midwest.

To alleviate the hardships caused by these conditions, government-owned feed grains were offered at reduced prices, and haying and grazing were permitted on lands diverted from crop production in many affected areas.

With feed and forage supplies already sharply reduced, and drought covering a much larger area than in 1962, need for emergency assistance for livestock herds became virtually constant in some areas.

We started calendar year 1963 with a livestock feed program available in 244 counties of 15 States.

By April 1963, when the effects of a severe winter on the heels of prolonged drought had cut feed supplies in many areas to a minimum, the emergency livestock feed program was active in 530 counties and parishes of 26 States. In the same period a year earlier the emergency program had been in effect in 193 counties of 13 States.

In addition, cost-sharing emergency conservation assistance was applied through December 1963 to 64 counties in 10 States to restore damage done by floods, windstorms, and drought.

Funds allocated for this purpose amounted to \$5 million.

These emergency programs played a significant role in helping to stabilize farm income in a year hit by disaster.

Agricultural Conservation Program

This is a long-time program designed to combine income stabilization with conservation benefits. Through financial assistance, the Department helps farmers, ranchers, and woodland owners bridge the gap between the need for conservation on the Nation's farmlands and the actual application of conservation to the land itself.

While this program is able to help with only half the conservation work for which farmers request cost-sharing, it does contribute significantly toward meeting the Nation's needed conservation investment, estimated at \$2.5 billion annually. The popularity of the program is indicated by the fact that it was operative on about 1.2 million farms -- one-third the Nation's total -- in 1963.

Most farmers recognize the need for more adequate conservation and the income benefits to be derived from improvement of soil, water, woodland, and wildlife. But for many farmers cost-share assistance spells the difference between willingness and ability to undertake these improvements.

A significant accomplishment during 1963 was the national project whereby farmer community committeemen assumed the responsibility -- on their own time and without pay -- of encouraging farm and ranch operators who had not done any meaningful conservation work in the past 4 or 5 years to carry out a needed conservation practice which would also provide economic benefits to the farm family. More than 1 out of 10 of the farms participating in the ACP program were in this "new" category.

Improving Farmers' Bargaining Power

Other activities that help strengthen the farmer's position in marketing his production and achieving a more adequate and stable income include marketing orders and agreements, acreage marketing guides, surplus removal activities, and efforts to help obtain fair and reasonable transportation rates and services for farmers and shippers.

Milk Orders. Dairy farmers in 83 areas covered by Federal milk marketing orders are assured minimum prices based on supply and demand in each area; and consumers in these areas are assured adequate supplies of pure, wholesome milk.

About half the milk sold by farmers is now marketed under Federal orders. During fiscal 1963, 182,000 dairy farmers sold 52 billion pounds of milk -- worth about \$2.2 billion -- to handlers required to pay the Federal order minimum prices. The milk sold by handlers in the 83 marketing areas supplied 109 million people or about two-thirds of our nonfarm population.

Marketing Agreements and Marketing Orders. These are widely used to promote orderly marketing of fruit and vegetable crops, and so stabilize farm income as well as prices to consumers. The farm value of the products covered by these programs is more than \$1 billion a year. A new marketing order covering cranberries, put into effect in 1963 after approval by cranberry growers, brought the total number of agreements on fruits and vegetables to a record high of 45.

Marketing Guides. These guides furnish vegetable growers with analyses of the market demand for their crops. These, too, aim at stable and adequate farm income. Estimated market demand for each crop is translated into acres of farmland needed to meet it. Farmers can regulate their plantings accordingly. In 1963 we published guides for winter vegetables and sweetpotatoes, vegetables for commercial processing, and summer and fall potatoes.

Buying Surpluses. As still another means of helping farmers achieve a more adequate and stable income, the Department buys surplus commodities for distribution to various outlets or for diversion to nonfood uses.

Foods purchased and distributed to schools, needy families, and institutions include: Milk, canned chopped meat, lard, canned pork, dried eggs, chickens, turkeys, ground beef, peanut butter, sweetpotatoes, peaches, cranberries, pears, honey, and a variety of canned fruits and vegetables.

A potato diversion program was conducted from December 1962 to May 1963 to ease the difficult surplus potato situation. More than 300,000 tons of potatoes were diverted from normal trade channels for use in starch, flour, and livestock feed. Growers received diversion payments of \$1,355,000.

Holding Down Transportation Costs. Department transportation specialists participated in 86 separate actions, involving public hearings before carrier rate bureaus and the Interstate Commerce Commission, with respect to freight rate and service adjustments. In this way we help hold down marketing costs for farmers and agricultural shippers and improve transportation services.

To alleviate the effects of severe drought conditions in several States, the Department also worked closely with railroad representatives in getting reduced rates on livestock feed and hay.

Matching Fund Program. Matching fund programs conducted by State Departments of Agriculture in cooperation with the USDA are another means by which we help producers and marketing agencies solve their marketing problems and bolster income.

In 1963 our Agricultural Marketing Service helped 42 States plan and carry out 127 such projects, and paid up to half their cost.

Here is a typical accomplishment under this program:

Wisconsin and Minnesota dairy processing and marketing cooperatives participated in the service program to develop efficiencies in management and in marketing of milk. These plants handled about 900 million pounds of milk in 1962. Assistance in effecting a merger of 2 cooperatives resulted in savings of 17 cents per hundredweight of milk.

Strengthening Farmer Cooperatives

The basic job of our Farmer Cooperative Service is to help farmers operate and use their cooperatives more effectively for income improvement.

Many FCS studies point the way to impressive gains through cost-saving improvements. Some examples:

A Midwest grain cooperative is now applying findings of a Department study on grain losses during shipments. The study shows that grain shippers can earn \$6 more per car by eliminating conditions that cause losses. Since this cooperative spends \$40 million a year on rail shipments alone, savings should be sizeable.

A veal calf study indicates that producers receive \$1 to \$2 more per hundredweight when their calves are pooled than if sold singly.

A series of studies in cooperation with North Carolina State University to improve peanut marketing indicates that a shift from bags to an efficient bulk handling system could reduce yearly marketing costs as much as \$750,000.

Education Helps. The Department uses the latest and best educational methods to help farmers make sound business decisions based on an understanding of the economic forces affecting them.

Such education, for example, has helped equalize the number of farrowings between spring and fall pig crops, leveling out the hog cycle and promoting price stability.

Through training schools and meetings, our Extension Service, cooperating with industry, has helped more than half the Nation's 36,000 mechanical cotton picker operators and 40,000 mechanical stripper operators to harvest for better quality. Application of up-to-date research in machine operation, defoliation, moisture control, trash control, and other practices has minimized quality defects in cotton. We estimate that half the cotton harvested with spindle pickers in 1962 was improved at least \$5 a bale, a \$15 million boost for the Nation's cotton producers, due to this government-industry educational effort.

Statistics for Progress. Today, more than ever before, we need timely and accurate statistics on farm production, farm commodity prices, product use, and other aspects of the business of farming. During 1963, our Statistical Reporting Service, supported by 700,000 voluntary farmer reporters and 150,000 businessmen, issued 700 scheduled statistical reports on the farm economy.

Statistical services to farmers are both direct and indirect. Direct services help farmers in making production plans and marketing their products. Indirect services help them maintain orderly markets and stabilize farm product prices.

Lightning-fast electronic computers at agricultural colleges now give farmers in New England, Virginia, Michigan, Missouri, and other States a valuable management aid. Agricultural colleges operate these electronic recordkeeping programs, with county agents and farm management specialists helping to analyze records. Farmers pay a fee for the service, usually based on crop production or number of livestock.

Farmers mail in coded figures on production, income, and expenses. In seconds, the computer analyzes these and types out a summary of the farmer's income and expenses, plus a cumulative total for the year. The farmer receives monthly and annual reports telling him how he's doing. He can compare production per cow, labor costs of producing 100 pounds of milk or bushels of corn, output per dollar of fertilizer, and dozens of other factors. This gives him an up-to-date picture of his entire farm operation and provides the basis for considering any changes needed.

The Family Farm

Through all these means we endeavor to strengthen the income of the American farmer. And it is evident we have had some success. But the income of the average farm family is still less than three-fifths of that received by the average nonfarm family.

As we pointed out in the beginning of this section of the report, farmers' costs are still rising; the farmer's share of the consumer food dollar still declining. Much remains to be done, therefore, to strengthen farm income, and especially to strengthen the economic position of the family farm.

The family farm is the key production unit of our agriculture. How is this key unit faring? Is it bearing up under the pressure of the technological age? Or is the family farm becoming debilitated, enervated, exhausted by the heavy demands with inadequate recompense that have been made upon it?

A special study of the Nation's 102,000 largest farms -- those with annual marketings of \$40,000 or more -- reveals three important facts.

First, an increasing proportion of total farm marketings is coming from these farms: 33 percent in 1959 compared with 16 percent in 1939.

Second, this increase mainly results from the presence of more farms in this group rather than from a growing value of sales per farm. From 1939 to 1959, the number of

farms with annual sales of \$40,000 to \$99,999 increased 242 percent, but their sales per farm increased only 8 percent. For the same period, the number of farms with sales of \$100,000 or more quadrupled, but marketings per farm rose only 10 percent.

Third, of the group of farms with marketings of \$40,000 and over two out of five were family farms in 1959. This contrasts with one out of five in 1949. Of the 20,000 farms with marketings of \$100,000 or more in 1959, 11 percent were family farms and they accounted for 8 percent of all sales from this group. In 1944, there were no family farms marketing \$100,000 or more. Of the total marketings of all U.S. farms in 1959, family farms contributed 70 percent, compared with 67 percent in 1944.

The conclusion is clear: Family farms are more than holding their own in the rapidly changing, highly technological, and increasingly specialized farming in America today.

But the corollary is even clearer: We can, and must, do better.

SELLING OUR FARM GOODS ABROAD

The following occurrences, and thousands like them, are products of U.S. agricultural trade and aid.

A teenager in Japan sits down to lunch; his bread is made from U.S. wheat, bought by the Japanese and paid for in dollars.

Workmen building a new school in Peru get part of their wages in U.S. food products.

A Swiss housewife cooks dinner for her family. The meat course? Fried chicken from Arkansas.

A visiting agriculturist from India watches intently as a county agricultural agent in Texas shows him how to take farm research results to farmers.

A shipping clerk in Chicago prepares paperwork on an order of Indiana soybeans bound for West Germany--one of approximately a million U.S. jobs dependent on agricultural exports.

Exports Up Sharply

During the 1962-63 fiscal year, dynamic cooperative action by the Department of Agriculture and private traders kept U.S. agricultural exports at a \$5.1 billion near-record level for the second successive year.

This was a remarkable achievement in view of such major developments in foreign markets as the imposition of variable import levies by the European Common Market; increased cotton production in foreign free world countries; and some delays during shipping tie-ups from late December 1962 to late January 1963.

A sharp increase during July-December 1963 indicated that exports for the 1963-64 fiscal year could rise to \$6 billion -- an increase of one-third in 4 years.

Agricultural exports currently represent one-fourth of total U.S. exports and are an important factor in maintaining our balance of payments. The output of 75 million American acres -- 1 harvested acre in 4 -- moves abroad.

Here are some of the details of the export picture. Our shipments abroad include more than half our output of wheat, rice, dried edible peas, and hops; two-fifths of our production of soybeans, nonfat dry milk, and tallow; one-fourth of our output of prunes, raisins, cotton, tobacco, and off-farm sales of feed grains; and one-fifth of our dry edible beans, lard, and cottonseed production. Seventy percent of these exports are for U.S. dollars: cash sales. The other 30 percent are Food for Peace exports: sales for foreign currency and long-term credit, donations, and barter.

Agricultural Trade--A Two-Way Street. Foreign agricultural trade goes two ways, and Americans benefit from both exports and imports. In 1963, the United States imported \$4 billion worth of farm products. Some of these imports supplemented items produced in the United States; such as sugar, some special grains, meat, and wool. Other imports were commodities not produced here: coffee, cocoa, tea, silk, rubber, and spices.

Farm Exports Provide 1 Million U.S. Farm and Industry Jobs. Farmers benefit from agricultural exports because they can sell more products, but other Americans benefit, too. Farm exports create jobs, both on and off the farm -- altogether about 1 million.

The jobs attributable to agricultural exports are distributed through all the States. They range from 129,500 jobs in Texas, 65,400 in Mississippi, and 61,000 in Arkansas to 200 in nonagricultural Rhode Island. Off-the-farm jobs are created in the fields of finance, land transportation, storage, and ocean shipping. Our farm exports in 1963, for example, were enough to fill more than a million freight cars, or 4,500 cargo ships, an average of 12 shiploads every day of the year.

U.S. farm exports go to over 125 countries and territories. In the advanced industrial nations, such as the Common Market countries, we are aggressively promoting sales of products in competition with other exporters. In less developed countries, the key to export sales is economic development, which increases the ability to buy. How this can work is illustrated by Japan. Japanese postwar economic recovery and development, plus active promotion on our part, have made Japan currently our best cash customer for farm goods. Only a few years ago the Japanese were receiving U.S. farm products on special terms under Food for Peace programs. Today, they buy half a billion dollars worth a year and pay in hard currency.

Expanding Our Exports

Our export expansion efforts fall into three general categories:

1. Obtaining reduced foreign tariffs and lowering or removal of other foreign barriers to the export of American farm products.
2. Foreign market development, chiefly in dollar-customer countries.
3. A Food for Peace program to meet human needs and spur economic development that will mean future cash markets.

Intensive Market Access Drive

We intensified our drive in 1963 to maintain and broaden access for U.S. farm products in foreign markets.

Much of the effort was focused on the European Economic Community, which initiated a protective system for its agriculture based primarily on variable import levies and minimum import prices.

EEC Purchases Drop. In 1962-63, the first year after the imposition of variable import levies, U.S. agricultural exports to the European Economic Community declined 10 percent. Commodities subject to the variable levies, consisting principally of wheat, wheat flour, and poultry, were down 26 percent as a group.

The system thus far has been particularly damaging to U.S. exports of poultry and wheat flour to the Common Market. Broiler and fryer exports to EEC countries fell off in 1963 to less than half the total of a year earlier, and wheat flour exports dropped by 40 percent.

Some Trade Concessions to EEC Withdrawn. The long disagreement with EEC over the tripling of poultry import charges into Germany came to a head in 1963. When patient negotiations to obtain less onerous charges failed, the procedures of GATT (General Agreement on Tariffs and Trade) were used to determine the value of the trade affected by the EEC's new trade barriers. A panel of experts fixed the amount at \$26 million, and the United States withdrew a corresponding amount of tariff concessions that it had made to Common Market countries in the past. This step, taken regretfully, was a necessary and forceful demonstration to EEC that its existing trade commitments cannot, with impunity, be revoked.

Background of Trade Negotiations. As preparations were made for the sixth (or Kennedy) round of tariff negotiations under GATT to begin early in 1964, the Department was united with other agencies of the Government in an approach designed to maintain and improve market access for American agriculture by (1) getting agreement on trade liberalizing objectives; (2) keeping agricultural and industrial products tied together in the bargaining; (3) reducing fixed tariffs; and (4) seeking assured shares of foreign markets for outside suppliers such as the United States, based on recent trade history, wherever import control systems threaten to reduce access to these markets.

The EEC, on the other hand, was stressing a plan which would in effect make its own protective levy system legitimate in the eyes of all GATT members and bring about its broad use by such members. This would be a reversal of what we in the United States have worked for since the days of Cordell Hull. It would revive restrictive principles that are uneconomic and unsuited to the needs of the 20th century.

As we looked ahead, it became clear that the question of access to markets had become the most crucial element in our export marketing future.

Market Development Expanded

Where access to markets exists, sales opportunities exist. An aggressive and expanded overseas market development program, conducted in cooperation with producer and trade groups in more than 60 countries, continued in 1962-63 to stress sales promotion, quality products at competitive prices, and marketing services.

Among the commodities being actively promoted are cotton, soybeans and soybean products, wheat and flour, feed grains, rice, seeds, dry beans, meat products, lard, tallow, hides and skins, dairy and beef breeding cattle, citrus fruits, dried fruits, cranberries, and red cherries.

Most of this promotion is carried on in the economically developed, dollar market countries. Activities include exhibits at international trade fairs, sponsored visits of foreign buyers to the United States, consumer promotion programs using U.S. merchandising techniques, press and radio publicity, and sometimes paid advertising. A U.S. Trade Center was opened by the Department in Tokyo in cooperation with the Department of Commerce.

The biggest "solo" food and agricultural exhibition ever sponsored by the Department was staged in Amsterdam, the Netherlands, during November 1963. It was accompanied by a symposium on agricultural trade in which opinion leaders in agriculture, labor, government, science, and the food trade from Western Europe and the United States freely exchanged viewpoints on trade problems and opportunities.

Since 1955, USDA has helped sponsor 135 exhibits in 32 countries to an estimated 51 million people. This is American salesmanship at work.

U.S. export promotion is a cooperative government-private venture. Private industry contributions are about \$8 million a year, with government contributions averaging about \$14 million a year. Private money comes from such groups as the Cotton Council International, the Soybean Council of America, Great Plains Wheat, Dairy Society International, and about 40 others. Foreign trade organizations representing handlers of U.S. products also contribute time and money.

Market promotion is helping achieve striking results in expanding agricultural exports.

Intensified market promotion was a major factor in boosting exports of soybeans and products to record levels. Spain, a new customer 6 years ago, is now the biggest U.S. cash market for soybean oil (\$50 million worth a year).

Our combined exports of western white and hard winter wheat to Japan reached an all-time high in 1963, aided by continued large scale promotion and education. (The Japanese people eat three times more wheat each year than before 1940.)

Considerable attention has been focused on the Italian dollar market in feed grain promotion, and feed grain sales to Italy were five times as great in fiscal 1963 as they had been just 2 years earlier.

Exports of poultry to Japan, Greece, and other new markets where promotional projects are operating have increased, compensating in part for some of the losses in Common Market countries.

Market promotion in Western Europe has helped U.S. rice growers compensate for the lost rice market in Cuba. Rice exports have risen 22 percent in 1963.

Improving the Quality of Exported Products. The work of many agencies stands behind the recent sharp increases in exports of farm products. Most of our exports, as we have noted, must compete in price and quality with the products of other nations. Consequently, USDA agencies combine their efforts to improve the quality of product and service offered by U.S. exporters.

European importers have complained because U.S. citrus fruits suffered rind disorders and waste due to decay enroute. Research revealed that keeping citrus at favorable temperatures would minimize deterioration in overseas shipments. But how can temperature be controlled when fruit is loaded and unloaded several times between the orchard and its overseas destination? An experiment was attempted.

On November 2, 1962, 36,000 pounds of grapefruit were loaded at Lakeland, Fla., into a new highway trailer designed to insure temperature control. The load traveled over the highways to Auburndale, Fla., then by "piggy-back" train to Norfolk, Va., where the refrigerated trailer was placed on a freighter bound for France. After 10 days at sea, the freighter reached port. The trailer, with its grapefruit still undisturbed, took to the road again, reaching its final destination in Basle, Switzerland, on November 21. The fruit arrived in excellent condition. It had endured a 19-day, 4,000 mile journey, with temperatures varying only 3 degrees from loading to unloading.

The gratifying results of this test shipment have resulted so far in orders for citrus from buyers in Switzerland, France, Germany, and England.

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A new protective treatment has been developed which protects export grain not only during shipment, but for several months afterward.

Foreign Market Studies. Extensive information both on the world food picture in general and on specific situations is necessary for intelligent planning of foreign market development. The world food budget project which was begun in 1961 was continued, with projections extended to 1968. Extensive research got underway to serve as a basis for a complete revision of the world food budget commencing in January 1964.

Nine studies were completed during 1963 giving long-term projections of supply and demand of agricultural products for selected countries. Fourteen additional studies are underway.

These studies indicate that a rising level of economic activity and technological advancement is producing an expansion of farm output; but that it is also giving rise to increased consumer demand for selected higher priced products, including imported agricultural products.

Projections were also made for U.S. agricultural exports for 1968.

The Department is working with the Agency for International Development to analyze the "factors associated with differences and changes in agricultural production in underdeveloped countries" over the next 5 years. One phase involves a comparative analysis of available data relating to agricultural output and productivity for 25 to 30 countries. A second phase involves intensive studies of technological, economic, and institutional conditions affecting agricultural development in 10 to 12 of the less developed countries.

Our studies show that food needs in a group of underdeveloped countries on the threshold of substantial economic growth will exceed food production by \$21 billion by 1980. The food deficit in slow growth countries is expected to increase by \$4.5 billion by 1980. For the slow growth countries this indicates that an appropriate strategy of food aid should be directed toward the elimination of nutritional deficits as soon as possible.

Building Future Markets Through Food for Peace

The abundant production of American farms was shared with more than 100 million needy foreign people every day in fiscal 1963 under the Food for Peace program. Record Food for Peace shipments of \$1.5 billion accounted for 30 percent of total U.S. agricultural exports and shipments were largely of commodities in abundant supply, such as wheat, fats and oils, rice, and cotton.

Through Food for Peace, food from American farms was used in daily lunches for 40 million school children. Food earned by 585,000 workers in 19 countries as part payment for wages reached over 3 million family members. And victims of floods, famines, hurricanes, and other natural disasters received \$159 million worth of U.S. agricultural goods.

In recently emerging nations, where dollars are short, Food for Peace assists these nations in developing their economies and raising living standards.

Studies completed in Israel, Colombia, and Brazil, and those nearing completion in India, Greece, Turkey, Spain, and Egypt indicate that food assistance supplied under Food for Peace has in fact: (1) Contributed to increased consumption, (2) helped to stabilize food prices, and (3) facilitated economic development. To the extent that such aid contributes to better jobs and incomes, there is the likely possibility that commercial market potentials for U.S. agricultural trade will be increased in future years.

Food for Peace Program. This program has four basic parts.

The sales for foreign currency part of the program makes our farm products available to the many friendly developing nations which lack dollars to buy in commercial markets. In fiscal 1963, we sold about \$1.1 billion worth of farm goods to foreign nations for their local money. Part of this money is available for use within those countries for economic development projects.

In Pakistan, for example, sales-for-foreign-currency-money is being used for irrigation, canals, and other improvements on the Indus River which irrigates about 80 percent of Pakistan's cultivated land. These improvements will help boost food production and increase the income of the Pakistani; and this in turn will help make them customers for such other goods as tractors, locomotives, sewing machines, airplanes, and construction machinery.

Two-thirds of the local currency generated by Food for Peace is used for economic development. The balance is devoted to such activities as U.S. market development, utilization research (Italian research workers found a better way to make a skim milk-fruit

juice beverage, which could mean new sales outlets, here and abroad, for surplus dry milk), Government buildings (through fiscal 1963 more than \$7.6 million was used for U.S. Government buildings in 19 countries), vocational rehabilitation (such as a training center in India which rehabilitates blind people and helps them settle on small farms).

Emergency feeding is another part of Food for Peace, providing for disaster relief, famine feeding, child feeding, and work projects programs. In Peru, \$3 million has been used to supply flour, cornmeal, oil, and milk to feed 400,000 school children. School attendance in Peru has doubled since the program started. In Bolivia, \$413,000 has been used to supply food for 20,000 workers building roads, schools, and medical centers.

Food for Peace exports for such objectives totaled \$159 million in fiscal year 1963; disaster relief accounted for a large share of the total.

Donations and barter constitute a third segment of Food for Peace. Surplus foods are donated to nonprofit voluntary agencies (such as CARE) which in turn distribute them to needy people and school feeding programs in friendly countries. Donations of wheat, flour, dry milk, bulgur, corn, and other commodities in 1963 were valued at \$182 million. These foods are distributed to 77 million people in 114 countries, including 36 million school children. Twenty private agencies participated and helped feed the following estimated numbers of people: Catholic Relief Services (33 million), CARE (28 million), Church World Service (8 million), and UNICEF (5 million). These foods are clearly identified in both English and the language of the receiving country as "DONATED BY THE PEOPLE OF THE UNITED STATES OF AMERICA."

This part of the program also provides for barter (trading) of surplus farm goods for materials from foreign nations which we need; materials which cost less to store and do not spoil; items needed for military assistance abroad; and products needed for overseas construction on behalf of U.S. agencies.

Our cotton, for example, is traded for Indian manganese ore; and corn, wheat, tobacco, and dry milk are traded for such important minerals as asbestos, selenium, and celestite. Barter accounted for \$56 million of exports in 1963.

Credit sales for dollars, the fourth segment, provides for long-term dollar credit sales of U.S. farm commodities. Sales agreements under this program may be made either with another government or with U.S. and foreign private trade organizations. A dollar credit agreement with Bolivia is helping to rehabilitate mines in that country. Wheat flour, supplied under a long-term credit agreement, is bought by the Bolivian Mining Company and used as part payment of wages to miners. More than \$3 million worth of U.S. agricultural products have been purchased by Bolivia for this project. Long-term dollar credit exports in fiscal year 1963 totaled \$56 million.

Problems of Distribution. Food for Peace exports, under all four segments, reached more than \$1.5 billion in fiscal 1963. In the past 9 1/2 years, the United States has shared with needy people, mainly in the developing nations, nearly \$13 billion worth of agricultural products at export value. These shipments represent a third of the total value (\$39 billion) of U.S. farm commodities exported over the period.

Despite the vast quantities of food distributed under the Food for Peace programs, we are sometimes asked why still more is not thus dispersed.

There are three fundamental reasons. One is inability to distribute the food overseas. Storage facilities are practically nonexistent in many developing nations, most of which are in tropical or semitropical areas. Food sent there can quickly spoil.

Major difficulties often are caused by local customs concerning food; taboos which prevent certain races or tribes from eating a particular item. Food preparation also causes problems. For instance, wheat in its harvested form, or even as flour, often won't be used by people accustomed to rice; they have neither the facilities to make bread, nor the desire to use food which is foreign to their traditional diet.

A third barrier to unlimited free distribution of food overseas is economics. Before another nation can accept free food, it must consider its own farmers and markets lest their domestic prices and production of agricultural products be undermined. We, in turn, must have advance consent before we can ship food to another nation.

Providing food for human survival thus depends on many complex and interrelated factors. Fulllest socio-economic development of people in many of the needy "have not" nations is more than a physical process. It depends on their state of mind. If a spirit of self-help can be developed, along with responsibility for self-betterment, the people of a "have not" nation can make substantial progress. Development of such a spirit is one of the primary goals for our use of surplus food overseas.

Helping Nations to Help Themselves

Less Developed Countries Offer Great Potential Markets. Countries in Latin America, Asia, and Africa offer large, potential markets for U.S. farm products. They have tremendous internal needs for food and fiber. If these less developed countries can improve their economic conditions, their imports of U.S. agricultural commodities are expected to triple by 1980. Their economic improvement, however, hinges on the effectiveness of technical aid provided by the United States and other leaders of the free world.

A country's ability to trade is closely related to the per capita income of its people. Yet 60 to 80 percent of the people in these developing nations live in rural areas and have little cash income. They suffer from illiteracy, insufficient food and housing, and ancient farming methods. Thus, agricultural development is a key to the whole scheme of their economic growth.

Recognizing the importance of solving these rural problems, U.S. agencies and international agencies participating in development work have come to the Department with increasing frequency to request technical aid. The number of such requests doubled in 1963 alone.

To enable the Department to respond more effectively to these calls for assistance, we established in August 1963 the International Agricultural Development Service (IADS). The task of IADS is to coordinate the Department's programs of technical assistance and training and to maintain effective liaison with AID, land-grant institutions, foundations, and other agencies participating in technical assistance.

Requests for assistance receive careful analysis by IADS and the technical services of the Department. Often a team of specialists is sent to a country to study past and present assistance activities and to identify needs for improving agricultural development programs. Through subsequent agreements to provide our technical assistance, agencies of the Department send their own people to serve as advisors. This arrangement puts the full resources and experience of the Department behind every USDA technical advisor working abroad. And it benefits the Department through useful experiences in new situations for our people.

A major obstacle to agricultural development is the relative absence of trained people. The Department of Agriculture cooperates in a major effort to supply this lack.

In 1963, the Department planned and directed training in the United States for more than 3,000 agricultural technicians, scientists, and leaders from over 100 countries. These were strategic, career people who work closely with important development programs. After studying at the Department of Agriculture and at State agricultural colleges and after visiting county agents, private companies, farm cooperatives, and farmers, they return home to spread their new knowledge among their own people.

Sometimes these "students" make great contributions to agriculture in general.

A Pakistani botanist, studying agriculture at Texas A. and M. College, developed a new grain sorghum, with grains 25 to 50 percent larger than those of present-day commercial sorghums. In addition to promising greatly increased yields, these new plants are also fertile, a distinct advantage over many of the hybrids now planted. The Pakistani scientist's work has been termed a major breakthrough. He is continuing his work as a grain scientist in Pakistan where more food is needed to set economic development in motion.

Another trainee, from India, spent a year as a visiting county agricultural agent, learning how information gets to farmers, and how farmers use research to do a better job on the farm. As an indication of how well such people-to-people relationships can work, it is interesting to note that this man made so many friends that local Americans took up a collection to bring his wife over from India.

State extension workers are making a valuable contribution in training foreign nationals who come to the United States to learn how to establish and strengthen extension services in their own countries. Federal Extension Service staff members help train U.S. Peace Corps volunteers preparing for extension-type work in other lands. Cooperating with the Agency for International Development, we have prepared a series of bulletins on health, sanitation, and food storage for use in developing countries.

Americans Working Abroad. In addition to training foreign nationals in the United States, the Government has several thousand Americans overseas actively helping friendly nations improve their economies. Though they represent various agencies, most of these Americans work in agriculture.

Cooperatives. Many underdeveloped countries are showing a growing interest in cooperatives. To assist them, we prepare and provide publications and information to the Agency for International Development, Peace Corps, United States Information Agency, Voice of America, International Training Center for Cooperatives, and others.

In 1963, some 600 foreign visitors from 60 countries interested in farmer cooperatives benefited by discussions, academic courses, and visits to operating U.S. cooperatives, conducted by our Farmer Cooperative Service.

Exchanging Agricultural Information. International exchange of scientific information is also vital to progress. Our National Agricultural Library actively cultivates this exchange by sending the Department's publications to foreign libraries, experiment stations, farm organizations, learned societies, and similar institutions. In return the Library makes publications from these institutions available to American scientists.

The Library has been particularly active in helping foreign schools, such as the College of Agriculture of the University of Liberia at Monrovia, secure essential publications. The publications will be used not only by faculty, staff members, and students at the University, but also by agricultural workers, students, and teachers in Liberia.

Working closely together the newly established International Agricultural Development Service, the Agency for International Development, and our Library assist foreign nations by developing and arranging a year of study and training in library techniques in the United States, after which the participants return to their homelands to apply this much-needed knowledge.

A field assistant in the Tanganyika Ministry of Agriculture was accepted for training in agricultural library science in this country. Upon his return to Tanganyika in August 1963, he went to work in the Central Veterinary Service Library in Dar Es Salaam, where he is using his training both to get farming information to the agricultural staffs and farmers throughout his country and to train other librarians.

A Critical Period

This is a critical period in our agricultural trade. Though farm exports are now at an all-time peak and still rising, the events immediately ahead will likely determine whether these export records will stand for years to come or whether we can continue to climb to new heights to the benefit of our agriculture, our Nation, and the world.

In their negotiations, the trading countries of the world and the agricultural producers in those countries may choose to travel either the high road of trade expansion or the low road of restrictive, agricultural and trading systems.

If the trading countries take the low road, it will inevitably mean higher costs to consumers, lower standards of living, political differences arising out of economic protectionism, and a far more difficult world to live in.

If, on the other hand, we can help persuade them to take the high road, it can mean expanded markets, increased income for agriculture, a better day for the world's consumers, and a lessening of international tension. This, of course, is our goal.

The direct, full, and comprehensive service of all the people is particularly characteristic of the USDA.

The Department's most obvious contribution is that of helping the Nation's farmers provide now, and assure for the future, bountiful supplies of food and fiber at reasonable costs. But in dozens of other less apparent ways the Department also serves consumers-- through such means as improving nutrition, providing effective tips on meal planning, making shopping more convenient and efficient; offering guidance in planting a garden or tending a lawn; and helping Americans everywhere in the country enjoy their recreation, safeguard their health, and even protect themselves to whatever extent is possible against nuclear extinction in the event of enemy attack.

Abundant Food for Better Living

The average American family is almost unique in the world in that it can buy a great variety of high-quality food at any time of year for a smaller part of its take-home pay than ever before in history. For only 19 percent of his income (after taxes) the American consumer is provided with a well balanced, attractive diet -- a smaller percentage than is paid by the consumer in any other nation on earth. The average consumer in the Soviet Union, for example, spends almost half of his income on food; on food, incidentally, that runs heavily to starches and cereals.

The force behind this achievement is a revolution in farming techniques which has made it possible for 1 farm worker to furnish the total food and fiber needs of 26 American consumers and 5 persons overseas. One farmer today provides food and fiber for twice as many persons as in 1950, and for three times as many as in 1930.

The same revolution has sharply scaled down the relative cost of "good eating."

If American farmers in 1963 had used the same production methods as in 1939, the cost of producing the Nation's supply of food and fiber would have been \$17 billion higher. This would have added more than \$300 to each family's bill for farm products in 1963.

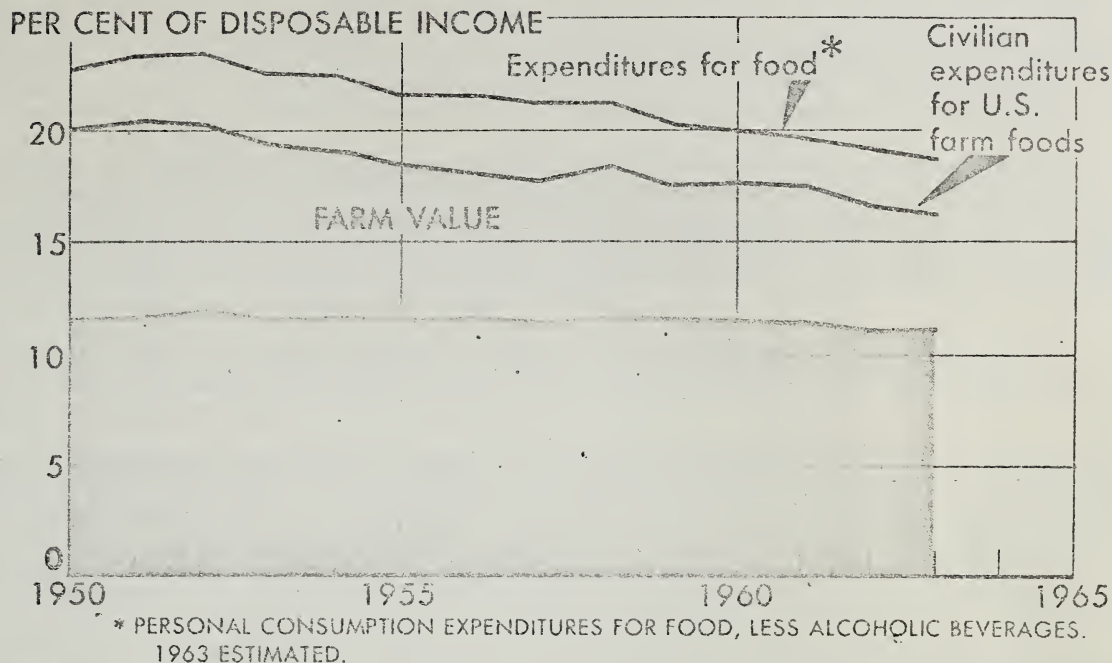
While no one would contend that all of this progress stems from the Department's activities, it cannot be denied that the USDA has played a major role in the technological revolution.

Research Provides More Food

Scientific research running the gamut from seed improvement to the latest developments in engineering and mechanization has been effectively applied to agriculture under our system of State-Federal cooperation in research and education. Many of our scientists, both in the Department and in the States, are world authorities in their specialized fields. Their work is meaningful to every man, woman, and child in America in terms of more abundant living.

The continuing effects of abundant, low cost food supplies are evidenced in another rise in per capita food consumption in 1963. The average American consumed one-half of one percent more food than in 1962. This is a substantial increase for a single year, as is indicated by the fact that the total gain in per capita food consumption since 1947-49 is 4 percent. Our people continue to go in heavily for meat protein. They ate per capita about 170 pounds of red meat last year, 4 percent more than the high level of 1962. Increased beef consumption accounted for most of the rise.

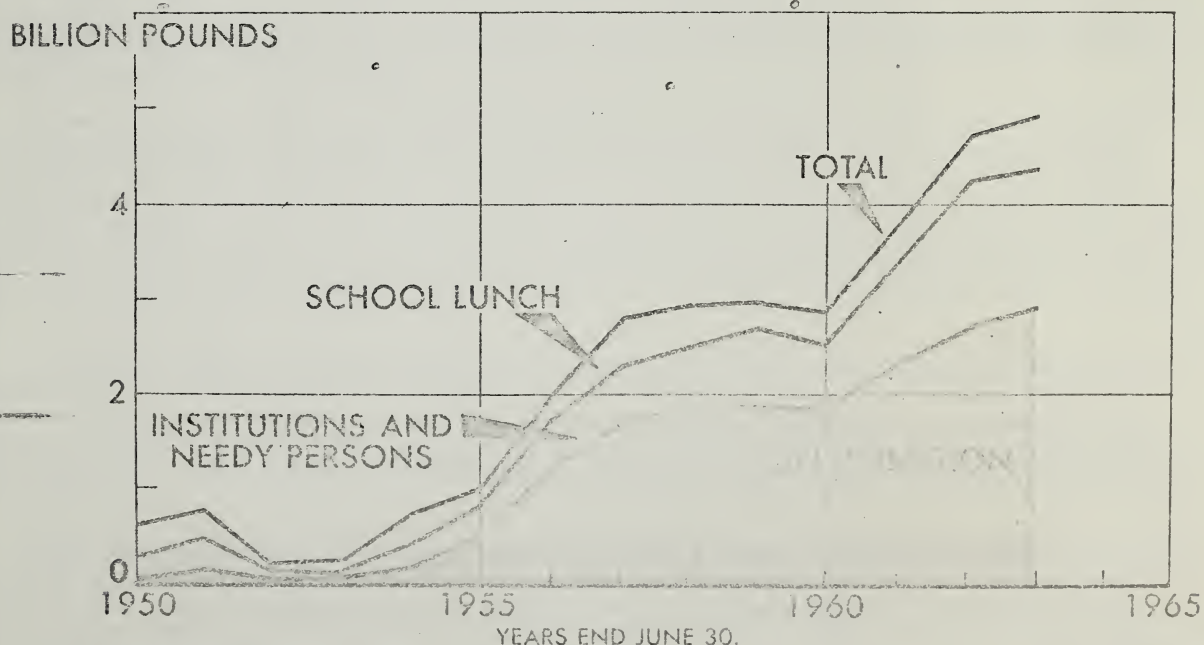
FOOD BILL TAKES LESS OF SPENDABLE INCOME



U. S. DEPARTMENT OF AGRICULTURE

NEG. 2189FI-63(9)

FOOD DONATIONS EXPAND FURTHER DURING '63



U. S. DEPARTMENT OF AGRICULTURE

NEG. 2380FI-63(10)

For the past 3 years the Department has given more emphasis than ever to improving the diets of those who, experience has shown, are most likely to lag in good nutrition. Through the School Lunch Program, the Special Milk Program, the Family Food Donation Program, and the Food Stamp Program, we have directly helped to upgrade the diets of 35 million persons. These included 26 million children in schools and institutions, 7 million persons in needy families, and 1.4 million persons in charitable institutions.

Overall, in 1963 about 1.9 billion pounds of food, valued at \$354 million, were donated throughout the 50 States and the territories. This was somewhat less than in 1962, mainly because of the expanding Pilot Food Stamp Program. The Food Stamp Program seeks to improve the diets of low income families through normal channels of trade rather than through food donations. (Total food donations, however, because of food supplied to foreign nations, reached a new high in 1963.)

During the year we made available a million pounds of foods to help feed some 50,000 persons in 8 States and Puerto Rico, who had been driven from their homes by hurricanes, floods, or other natural disasters.

School lunches served under the National School Lunch Program are a valuable aid to health and good nutrition. Fifteen million youngsters in 66,715 schools were served a total of 2.6 billion lunches which provided from one-third to one-half of their daily food needs. For some, it was by far their best meal of the day. These schools bought \$641 million worth of food in local markets and received \$180 million worth of donated commodities from USDA, plus Federal cash assistance funds amounting to \$108.6 million.

Food services at school are being provided to approximately 1 million additional children each year. Several million children, however, cannot obtain a meal because they attend older schools, often in low income neighborhoods, which are not adapted to installation of school kitchens. We have initiated research on central food preparation and distribution procedures that might be used to solve this problem.

Children able to do so pay for their lunches. The price, however, is always far below the cost of a similar meal at a commercial establishment. Moreover, schools participating in the program must serve lunches either gratis or at reduced cost to children unable to pay the normal charge.

In addition to providing a nationwide service to children by giving them a real bargain in good eating and teaching them valuable nutritional habits, the program serves agriculture by stimulating market development for many foods. Over the years, it has helped expand markets for nonfat dry milk, stabilized dried eggs, and canned citrus products. Bulgur, a promising wheat product new to this country, may soon be added to this list. In fiscal 1963, the Department initiated an experimental donation program in which limited amounts of bulgur were distributed to schools, institutions, and needy families. The initial response was good.

Through the Special Milk Program we encourage school-age children to drink more milk by making it available at reduced cost. The program was active in about 90,000 schools, child-care centers, nonprofit summer camps, orphanages, and similar institutions in 1963; 2.8 billion half-pints of milk were served. Added to the 2.6 billion half-pints provided by the School Lunch Program, the total represented 5 percent of all fluid milk sold.

Since the Food Stamp Program, started in 8 pilot areas in 1962, immediately proved its value as a practical means of increasing the food buying power of low income consumers, the experimental program was expanded to 33 more areas in 18 States during 1963. This enables us to test the food stamp method under a wider range of geographic and operating conditions.

During 1963, families participating in the Food Stamp Program received about \$50 million in food coupons. For these coupons they paid \$31 million, and the Federal Government contributed \$18.6 million. As of June 30, 1963, 360,000 persons were participating in the program. They received about \$6.50 per person a month in bonus coupons, the Federal Government's contribution to their food budget. The program improves diets, increases consumer demand for food, and bolsters farm income.

Besides these "aid programs," the Department improves the diets of our citizenry by working with food trade groups and food service organizations to attain maximum movement of the Nation's agricultural abundance through normal marketing channels. Besides our regular monthly merchandising programs to move foods in plentiful supply, 7 special nationwide programs and 30 regional food promotions were conducted in 1963 to speed up movement of food commodities in abundant supply. These included special promotions for dairy products, apples, wheat flour, red tart cherries, frozen orange juice, lettuce, and cheese.

Lower Costs

The Department administers programs designed to assure abundant supplies of specific commodities at prices reasonable for producers and consumers. Sugar is one of these commodities.

Preventing Runaway Sugar Prices

Sugar prices are normally very stable, but they performed erratically in 1963 under the pressure of tightening world supplies.

A speculative movement in early 1963 caused many sugar users to step up their purchases and stockpile sugar. Although there was no actual shortage of sugar for U.S. consumers, the stockpiling began to create one in terms of sugar immediately available. This naturally set off speculative price rises.

We acted promptly to prevent a price runaway by assuring sugar users of the adequacy of U.S. supplies. By early summer, most users recognized that supplies were in fact adequate. The Department had commitments that all of the sugar under the global quota would be delivered. One by one almost all of the foreign areas which had country quotas assured us that they would fill their quotas. When these facts were widely publicized, sugar prices receded to more normal levels.

In early fall prices rose again, due to production troubles in the Soviet Union and Eastern Europe (as evidenced by their need for grain) and to the damage inflicted on the Cuban sugar crop by Hurricane Flora. On November 5, the Department recommended to the Congress unlimited marketings of domestic sugar in 1964 and prices began to drop.

But the main reason that world sugar supplies remain insecure is the persistent failure of Communist agriculture in Russia, Eastern Europe, and particularly Cuba, which for generations expanded production whenever it was needed.

U.S. cane and beet growers harvested a record crop in 1963. Western Europe had a larger crop than in 1962. The Philippines had a bumper crop and expect a larger one in 1964. Production was generally good in Australia and the rest of Oceania. Although world sugar stocks are down, larger world production should ease the supply situation. The Department will continue its successful efforts to assure ample supplies of sugar to consumers at fair prices.

The "stabilization programs" operated by the Department, for example feed grains and wheat, serve a dual purpose, namely, that of assuring ample supplies on the one hand, and reasonable prices on the other. As such they protect the interests of producers and consumers. When supplies are abundant, as in the case of feed grains and wheat, the

protective feature of the program operates most noticeably on behalf of producers and the income stabilization feature is paramount. When supplies either are or appear to be short, with speculative runaway prices a threat, the consumer interest becomes primary and the program is directed toward assuring adequate supplies to counteract the inflated price. This was the situation for sugar in 1963.

Holding Down Marketing Costs

We have referred to the estimated saving of \$17 billion in the annual cost of producing food and fiber by the use of new methods, comparing 1939 methods with those of 1963. While this figure applies to production, cost savings in marketing have also become increasingly important. Agricultural research is a major factor in the revolution in food marketing, now well under way.

In grocery wholesaling, for example, many improvements suggested by USDA research have been adopted and have contributed to a reduction of some 50 percent in operating margins over the past decade and a half. In the years immediately following World War II, average markup ranged from 8 to 12 percent. Today, the average is about 5 to 6 percent.

In the fields of transportation, marketing facilities, and marketing quality, we are continually developing new and better ways to handle and ship products and to measure and maintain their quality. The individual achievements are not spectacular, but they are cumulative and effective.

Our marketing researchers have developed ways to reduce operating costs and waste of edible meat in poultry processing. They have developed pallet-box filling devices to hold down costs in the apple industry. They have developed invisible "air doors" to help cold storage warehouses operate more efficiently. They have designed new refrigerated truck trailers to afford greater protection for frozen foods, and they have provided new designs for plant constructions to enable ice cream processors to manufacture and sell their product at lower cost.

Peach sales have been increased through new packaging techniques. Economical wire baskets have been developed for short hauls of icepacked poultry. Cheaper icing methods have been devised for California cantaloups on their way to Midwestern and Eastern markets.

Marketing Quality

The Department helps farmers produce high quality products by developing and teaching better farming methods, introducing new crop varieties, and protecting animals and crops against pests and diseases. Beyond this, however, the Department helps to assure consumers of high quality products by such means as inspection, standards, grading, regulatory services, and the development of devices and techniques to make quality measurements more effective.

Meat and Poultry Inspection

Our nationwide meat and poultry inspection services, the finest and most comprehensive in the world, assure to American consumers a safe and wholesome supply of red meat and poultry. During fiscal year 1963, more than 25 billion pounds of meat and meat food products were processed under the supervision of Federal inspectors. Inspections are now conducted in 2,500 establishments. Inspectors also examine imported meat and meat products. During fiscal year 1963, well over a billion pounds were passed for entry into the United States, an increase of 27 percent over 1962.

Grading and inspection form a kind of team for the protection of consumers. Inspection certifies as to wholesomeness, while grading guides consumers in selecting the particular quality they want. In addition to the inspection services for meat and poultry, our graders and cooperators during 1963 certified for quality the following proportions of products sold off farms: Half the beef, lamb, and mutton; 16 percent of the veal and calf; 88 percent of the turkeys; 56 percent of the chickens; 21 percent of the shell eggs; and more than 50 percent of the total butter, cheddar, and nonfat dry milk produced. Also marketed under Federal grades were practically all of the grain, cotton, and tobacco, and 90 percent of the frozen and 60 percent of the canned fruits and vegetables. And produced under continuous inspection were 56 percent of the dried eggs and 77 percent of the liquid eggs.

Dairy graders made 3,400 dairy plant surveys -- 940 more than the year before -- to assist the industry in plant improvement, product quality improvement, and greater consumer acceptance of product.

Standards are the measurements according to which products are graded. During 1963, for example, we issued new U.S. standards for grades of instant nonfat dry milk, quality standards for manufacturing milk and minimum requirements for dairy plant operators for voluntary adoption by State governments.

In addition, we published a number of proposals for changes and innovations in grades and standards. Among these were:

A major revision of U.S. wheat standards, to provide a better basis for export sales and domestic trading. The changes were proposed as a means to improve the sales position of our wheat in export markets -- and to reflect improved methods of producing and handling wheat now in common use.

A grading system for beef to provide separate measures of meat quality and yield of trimmed retail cuts from a beef carcass.

A revision of official grade standards for wool, based on micron specifications. This would provide an objective, scientific measurement basis for the first time in the history of wool marketing in this country.

Grade standards for ready-to-cook poultry roasts.

During the year a new quality measurement for cotton was introduced -- micronaire reading service -- which determines the fineness of cotton fibers, thus helping spinners to find the type of cotton needed for various kinds of cloth, and better reflects the real market value of producers' cotton.

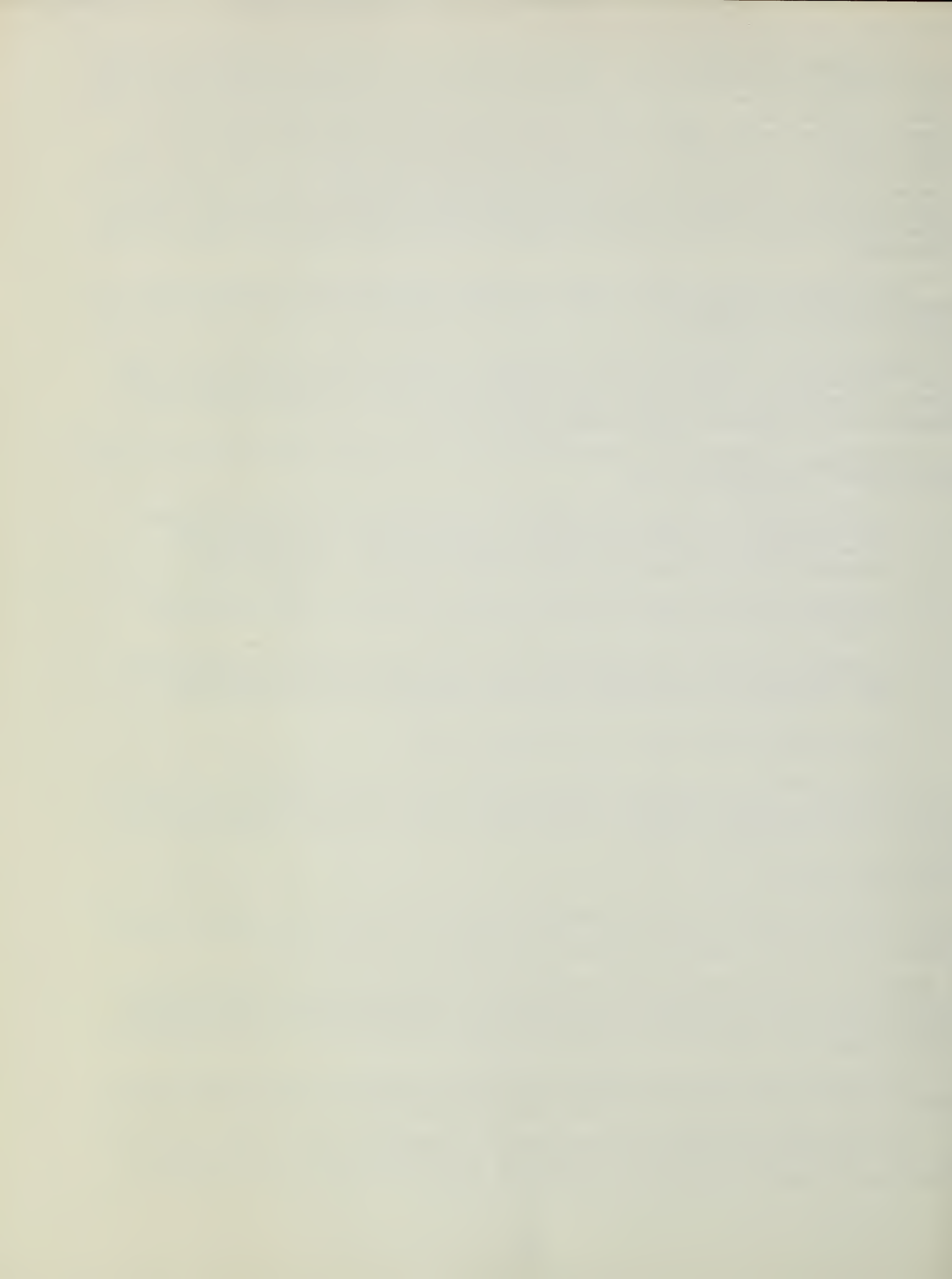
Regulatory Services

The Department administers regulatory statutes to assure fair play and fair competition in the market place; safe storage of farm products in licensed warehouses; and the protection of growers, those who market farm products, and consumers.

We have been diversifying our administration of the Packers and Stockyards Act in livestock and poultry marketing and meat packing. In 1963 this took the form of greater emphasis upon investigating and analyzing marketing methods and the economic effects of existing practices.

We initiated a full-scale investigation into poultry marketing practices and launched formal action against a major meat packer for engaging in unfair merchandising practices.

The Perishable Agricultural Commodities Act establishes a code of fair trading practices for fresh and frozen fruits and vegetables. The law also requires that fruits and vegetables be labeled accurately as to grade, size, State of origin, and net weight. During



fiscal 1963, spot checks for misbranding were conducted in 24 States. Investigators visited 514 firms, contacted 875 industry members, and examined 2,400 lots of produce to verify container markings. As a result of these investigations, we handled 337 misbranding cases, compared with 279 during 1962.

Producers and consumers benefit from the proper functioning of the commodity futures markets, and the Department regulates these markets to maintain free and competitive pricing in them.

Our investigations disclosed evidence resulting in several prosecutions during the year, charging large traders or brokers with price manipulation, exceeding speculative limits, wash sales, cheating, fraud, and other violations of the Commodity Exchange Act.

Measurement Devices

In their continued quest for quality improvement, our researchers have devised electronic means of rapidly measuring the moisture content of grain and the oil content of oilseeds. They have also developed standard lighting conditions for more efficient grading of grain.

Our researchers continually endeavor to invent and introduce devices, such as the "difference meter" which was developed in recent years, to provide rapid and accurate detection of internal defects in fruits and vegetables. Such instruments help protect consumers against purchases of foods with defects that are not apparent at time of purchase. Improvements in these devices are constantly sought.

New Products

Both consumers and farmers benefit from the new food products and new fiber capabilities developed by agricultural research.

Several such new and improved products were released or developed experimentally in 1963. Instant grapefruit juice powder, with remarkably fresh flavor, was added to the long list of processed fruit juices already made available by research.

A new method was developed for preserving dried fruit so that it is tender and palatable, and can be cooked rapidly without prolonged simmering, as is now necessary.

A frozen apple juice concentrate was developed and is now on the market.

The chemical basis for celery flavor has been discovered. Consumers may soon expect to see dehydrated celery products with improved flavor. The taste and appearance of precooked dehydrated sweetpotato flakes have been improved. A highly favorable reaction from consumers has greeted this new product. Production and use of dehydrated white potatoes continues to increase.

Among other recent advances is an improved evaporated milk with less "cooked flavor" and better storage stability. The required baking temperature for foods containing dried egg products has been worked out to assure their safe use. The finding that certain metabolic changes in poultry muscle affect tenderness is leading to improved processing methods and greater tenderness in poultry products.

Previous research has already added to the animal proteins in our diets by developing poultry that is inexpensive, nutritious, and plentiful; turkeys that will feed a small family; and bacon, ham, and pork chops that contain more lean meat instead of fat. Many of the processed foods that are standard fare in most American homes today -- the concentrated,

powdered, frozen, and dehydrofrozen products, whole precooked meals, and instant-type mixes of many kinds -- are also products of our research.

In the area of food processing and preservation, the application of the new freeze-dehydration process has attracted such interest that the volume of freeze-dried products may double or triple each year for the next few years. If so, the volume by 1967 could be equivalent to 400 or 500 million pounds of raw product annually -- about 2 percent of our processed food volume.

A study conducted by our researchers for the Atomic Energy Commission to determine the feasibility of atomic radiation to preserve certain fresh fruits and vegetables indicates that irradiation can extend the shelf life of most fruits and vegetables from 2 to 6 weeks. While produce handlers are enthusiastic about irradiation as a preservative, costs must be competitive with other methods and consumers must be convinced irradiated produce is safe for human consumption.

Our scientists are steadily adding new contributions to those already widely used by American consumers. Cotton fabrics with many specialized qualities, the aerosol bomb, improved paints, industrial chemicals and coatings, a blood plasma extender, and commercial methods for making penicillin; all these we take for granted.

Now, a method for producing stretch cotton -- slack mercerization -- is rapidly being commercialized for use in stretch knit goods and men's hose. An improved chemically-treated cotton batting for use in cars, furniture, and mattresses is being experimentally produced. And a new machine for determining the amount of trash in lint cotton will help manufacturers produce high quality cotton products.

Forestry research is steadily opening up new avenues for wood. Sugars have been derived from wood for some time. Now chemists have shown that by fermenting these sugars, polymeric alcohols can be produced identical to those from petroleum which are widely used in the chemical industry. Thus, from wood can come the industrial chemicals used in making resins and coatings, elastic and rigid foams, molded plastics, and a variety of other products.

Further research along these lines could lead to widely expanded industrial use of wood residues and low quality trees.

The southern pine industries have wanted to diversify into plywood manufacture for some time, but problems stood in the way of making good plywood from second growth southern pines. Forest scientists have now solved these problems. Two major new plants are being built, with at least three other plants anticipated.

Health Benefits

Sometimes our research has unexpected health or medical side benefits. Our scientists working on castorbeans have developed an allergy test, using monkeys as test animals, which can help solve problems of allergen sensitivity to castor and other substances. Medical and physiological research may find it useful.

Other scientists working on the sugar galactose have evolved a simple, sensitive test for diagnosing a rare but severe metabolic disease of infants known as galactosemia. Many hospitals have reported good results from the test, and some have already begun to use it to detect genetic carriers.

Improved Pest Control

We are continually developing more effective ways to control pests that injure not only crops and livestock but man himself. Heavy emphasis is being placed upon studies to develop entirely new methods for controlling insects. Among these are insect sterility; the

use of specific chemicals such as attractants, baits, and repellants; and biological control in which insect parasites, predators, or diseases are employed.

The sterile male technique -- which consists of rearing and sterilizing large numbers of insects and releasing them to promote their own destruction -- is now being employed successfully to control the cattle screwworm in vast areas of the Southwest.

The search goes on for new and improved techniques for the safe control of home, farm, and garden pests without danger to those who use the pesticides or to those consuming the farm products.

We have moved a step closer to control of houseflies with the discovery of a chemical substance in female flies that attracts males.

Our scientists have produced a synthetic attractant from the female cockroach that lures the males to places where they can be destroyed by any one of several methods.

And we have made progress in mass producing the bacterial spores that infect and kill the Japanese beetle.

Our plant and animal inspection and quarantine services are quite effective in keeping destructive and dangerous pests out of the country. Inspectors at ports of entry intercept plant and animal products containing injurious foreign pests at the rate of one every 17 seconds.

Less Residues

To combat the residue problem, we have developed treatment schedules to minimize residues on fruits and vegetables, and to work out improved methods and equipment for applying insecticides with greater precision.

The Department has intensified its educational campaign to make sure that everyone using pesticides is aware of the need for using them according to label directions. Posters, publications, radio and video tapes, press releases, motion picture films, and picture stories have been issued to warn people to choose and use pesticides with extreme care. In addition, the Department has revised its regulations governing the registration of pesticides to require that adequate precautionary statements be prominently displayed on the front of container labels.

Serving Consumers Through Education

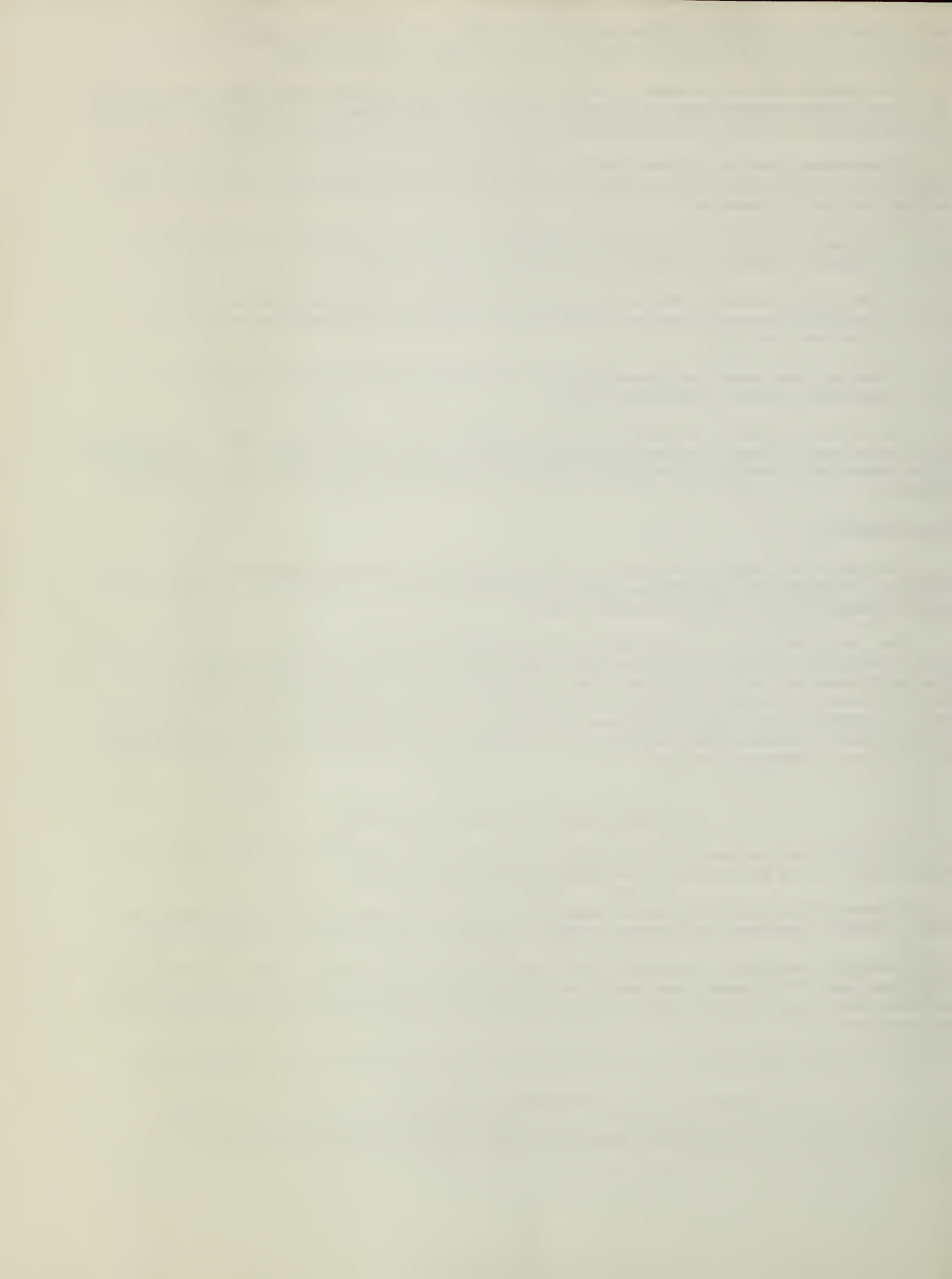
Through direct educational programs the Department increasingly helps consumers make better use of agriculture's contributions to better living.

In every State, Extension home economists teach consumers about buying and using food, clothing, housing, appliances, credit, insurance, and other goods and services.

Through newspapers and other publications, discussion groups, radio and television, consumer marketing specialists reach an estimated 70 percent of the U.S. homemakers, assisting them both to shop wisely and to reflect their wants and needs to the food marketing system.

Home economists in all States help teach the proper preparation of donated foods.

For 3 years, Extension home economists in Hartford County, Conn., have been working with young families and other special groups in a public housing project, teaching them budgeting, nutrition, and child development.



In Milwaukee County, Wis., an Extension home economist holds informal classes for people on relief. Nutrition, meal planning and preparation, wise buying, budgeting, homemaking, clothing selection, credit and installment buying, and child care are taught.

Better Food Handling

Some of our recent research studies have emphasized the need for proper handling of food in the home to prevent the loss of ascorbic acid and other nutrients essential to health. Up to three-fourths of the ascorbic acid originally present in vegetables can be lost by improper storage and preparation.

Research has determined the composition and nutritive value of some 2,500 foods, helping us understand more about foods and their effect on growth and health.

Potentially of the highest value, such information is of little use unless it can be carried to consumers and put to work in their behalf. Much of this "education" is done through the Extension Service.

USDA Educational Activity

In 1963, Extension workers prepared 585,000 news stories, took part in 414,000 radio broadcasts, and made 29,000 television appearances. They distributed 39 million bulletins and made 24 million farm, office, and other personal contacts with persons seeking information.

More than 1.1 million unpaid volunteer leaders multiplied the effectiveness of these workers. In 4-H Club activities, for example, 493,000 adult leaders helped 2.3 million boys and girls acquire the skills, knowledge, and attitudes that will make them more productive and useful citizens.

The Department's educational activities cover a wide gamut. Our home economics experts provide tips on buying clothes; on sewing for beginners; on mending, mildew control, repairing rugs, and removing stains; and on laundry methods.

Other experts offer helpful hints on home building, all the way from choosing the location and construction materials to plans for a step-saving kitchen and efficient purchase and use of household appliances.

We have seen how research helps provide the weapons for controlling insect pests. The Department's services do not stop there, but go beyond to furnish easily understood instructions in the most effective ways to use these weapons in controlling flies, fleas, chiggers, mosquitoes, cockroaches, ants, moths, and termites.

Outside the house, assistance is offered in planning, planting, and maintaining a garden, either vegetable or flower, and the lawn.

More and more nonagricultural users -- State, city, and town planning groups -- are requesting soil information applicable to urban and suburban areas. In fiscal 1963, for example, the Department participated in soil surveys in 20 urban fringe areas under formal cost-sharing agreements with cities and towns, and made surveys in at least 50 others, mapping about a million acres for immediate use in urban planning.

Recreation

There is a National Forest, or perhaps several of them, within a day's drive of almost any point in the United States. The 154 National Forests comprising more than 180 million acres are managed and protected by the Department in the interests of all the American

people. These forests offer an almost limitless wealth of enjoyment and benefit through their five major resources -- water, wood, outdoor recreation, grazing, and wildlife.

About 125 million visits were made to the forests in 1963 -- compared with the previous high of 113 million in 1962. Each year more of our people take to the woods to picnic, camp, fish, hunt, hike, and ride or drive the scenic routes.

The Department, serving as the agent of the American people, protects the forests and improves them so they can continue to offer their rich benefits to this and to future generations.

Our activities include tree planting; protection against fire, insects, and disease; management of wildlife; and building roads through the forests to make them more accessible. Many of these activities are carried out in cooperation with the States.

The value of the National Forests to all consumers, entirely apart from the recreational aspect, is indicated by the record 10 billion board feet of timber cut from them in fiscal 1963. The National Forests are the largest single source of timber in America. They provided one-fourth of all the saw timber and veneer logs harvested in the United States in 1963.

Other agencies of the Department, as we have seen in earlier sections of this report, also share directly in the provision of recreational facilities. Many services of an indirect nature are also provided. Here is an example.

The city of Stamford, Conn., planned to turn a 30-acre swamp into a dump. Home owners, contacting the Fairfield County Soil Conservation District, found after study of the site and a soils map, that the swamp could be made into a recreation center.

SCS soil conservationists made a location map for wildlife ponds and designed a drainage ditch to drop the water level 2 feet. The Stamford City Park Commission contracted the building of three ponds and had them stocked with fish. For an outlay of only \$4,500 the city provided its people with a 30-acre recreation center. The public now uses it without charge for fishing, skating, nature walks, and just relaxing.

Protecting Our People in a National Emergency

Local governments, in cooperation with State and Federal agencies, including the Department, have the responsibility of planning for community and national survival and recovery in the event of nuclear attack. The Department has urged farmers, the food industry, and all citizens to take steps now that would offer a measure of protection against the hazards of war.

The Department has been assigned responsibility, in time of defense emergency, for the production, processing, storage, and distribution of food through State and local authorities; for guarding against fire damage in rural areas; and for determining the need for stockpiling food.

We have in past years measured available food and beverage stock at the wholesale level and classified it by storability and location. There was found to be a 16-day supply of food and a 4-day supply of beverage per person in the United States, but with considerable variation among regions of the country.

In 1963 we continued moving ahead in civil defense preparedness.

USDA, State, and county defense boards have been established to conduct emergency agricultural operations. These boards would take emergency control of wholesale food supplies to service the needs of local authorities.

The Federal Extension Service, in cooperation with the Office of Civil Defense, has completed the first year of an education program for rural residents on how to protect themselves and their farm resources against the effects of nuclear attack. The program advises farmers on how to protect livestock, and how to tell when it is safe to resume farming. Civil defense specialists are being added to State extension staffs to develop and distribute survival information to farmers.

Agreements have been completed with all the States, the District of Columbia, Puerto Rico, and the Virgin Islands defining emergency food management responsibilities. This will help the USDA do its part in assuring adequate food under all conditions, and assist the areas in greatest need. The agreements stipulate that the USDA is responsible for the distribution of food stocks of wholesalers and food processors, while State and local authorities are responsible for the distribution of food in retail outlets, schools, and institutions.

More than 5,700 monitoring stations have been established by the USDA, and 18,000 employees have been trained to measure radiation levels. In an emergency Forest Service monitors would decide whether radiation levels in an area were low enough to permit entry of fire fighting personnel. Soil Conservation Service employees would determine when it is safe to resume farming operations. Meat and poultry inspectors are being trained to ascertain whether meat is contaminated by radiation.

Studies indicate that if transportation lines were cut, some large population centers and some sparsely settled areas would be seriously short of food soon after an attack. We have therefore asked for authority to stockpile food supplies near areas which would quickly use up existing supplies after an attack. Further studies are being conducted to gather additional information about post-attack food needs.

Eleven new defense publications have been issued. Three of the most significant are titled, "Food Management in a National Emergency," "Your Family Survival Plan," and "Your Farm Preparedness Plan."

Data is being prepared on how consumers can safely use locally produced food, and food in the home that has survived an attack. Research is exploring how weather affects mass fires, how mass fires would behave in different types of wooded areas, and advance plans for fire control.

Department engineers have designed two types of dual-use shelters which can be installed in the home. One of these shelters can serve in everyday use as a convenient fruit and vegetable storage cellar. The other can be used as a photographic darkroom as well as for storage.

Something that the Department does affects the welfare of every American 24 hours of every day. Some of these activities touch each of us directly, others less immediately. But hardly a minute of the day elapses but that some service which USDA performs helps to make our lives better, fuller, happier.

A LOOK AHEAD

American agriculture has made a massive contribution to the present economic progress of the United States. In the years ahead, agriculture's contribution will continue to be a major factor in our national development.

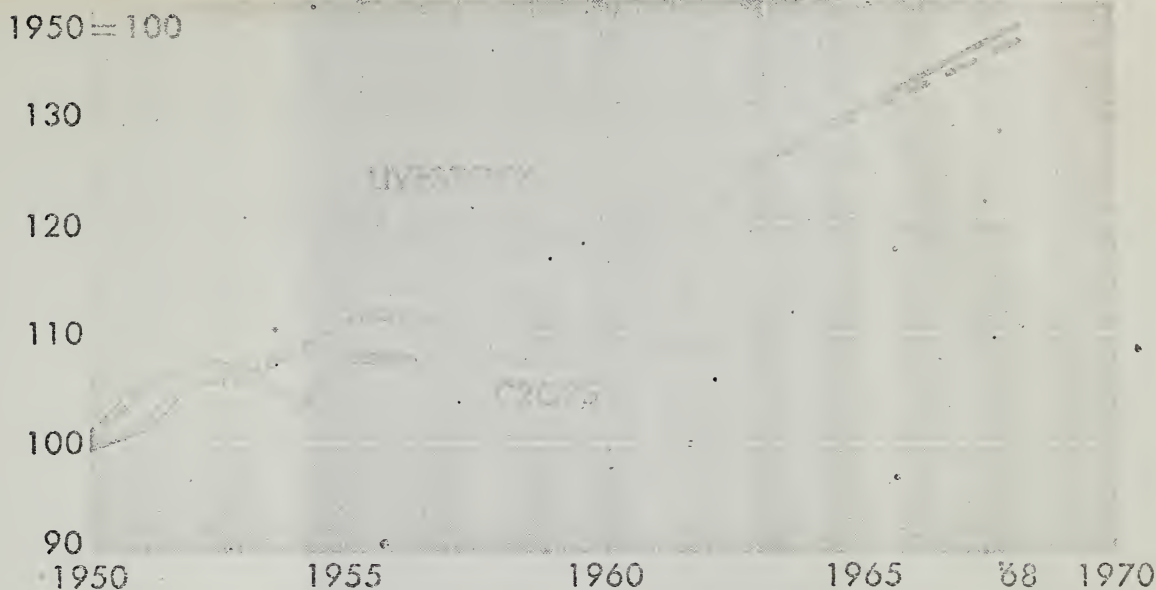
It will continue to supply us with an abundance of nutritious food, at prices low in comparison with prices of other goods and services. Such food prices mean higher real wages. This reduces inflationary pressures and provides the savings needed for the capital accumulation that is vital for economic growth.

Agriculture will meet increased demands for food, both at home and abroad, with fewer workers and less land than are being used now. This will enable us to use part of our farmland for other purposes -- for larger recreation areas and land reserves in the form of woodland, pasture; and range.

This will be one of the significant changes in rural America. Add to this, increased job opportunities, more and better educational and health facilities, improved housing and a greater use of total resources, and we can expect substantial progress in rural renewal.

American agriculture will also make important contributions to world economic growth. This, of course, is not a new role. During the early 19th century the cotton gin and cultivation of new lands in the South provided Britain with abundant supplies of cheap cotton. These exports played a vital role in our own economic growth by financing imports for consumption and capital for economic development. But greater opportunities by far have been opening and lie before us in the 20th century. American agriculture's exports both of products and of know-how can help form a world in which all nations can enjoy a greater abundance from the soil -- and out of this, perhaps, a new birth of freedom and security.

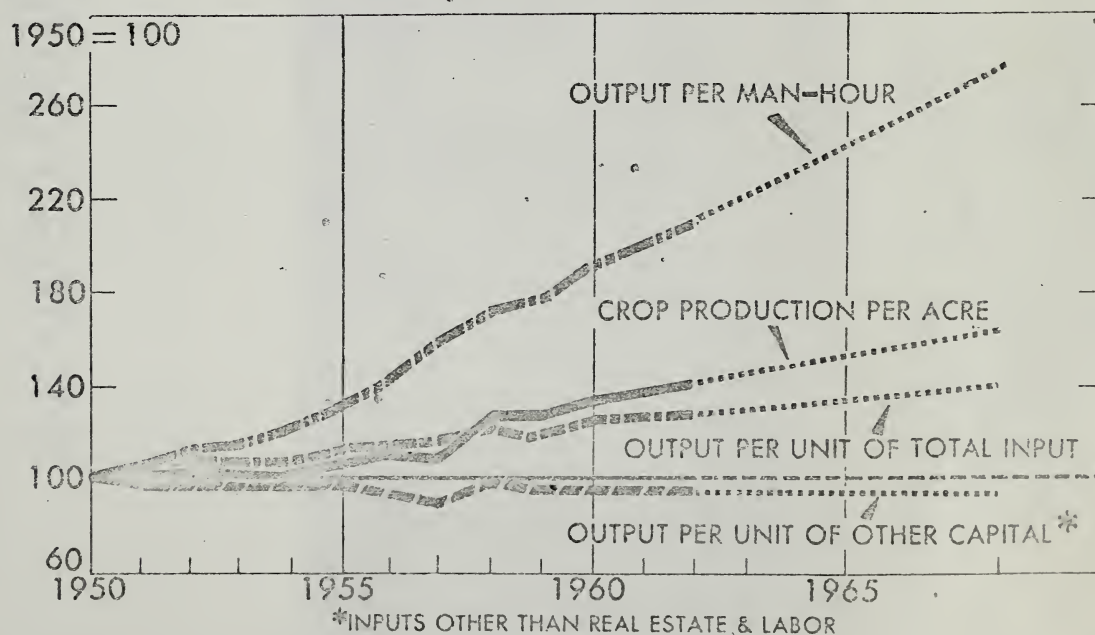
FARM OUTPUT TO CONTINUE RISING INTO '68



U. S. DEPARTMENT OF AGRICULTURE

NEG. 1357AFI-63(10)

OUTPUT PER MAN-HOUR TO CONTINUE RAPID RISE



U. S. DEPARTMENT OF AGRICULTURE

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